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Essays on Instituting Internal Audit and Risk Management in Banks

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(Talcott) Parsons walked down the hall in Harvard's Littauer Center to his colleagues in the Economics Department, alerting them to his ambitious plans and assuring them that he had no designs on their terrain. Thus, Parsons made a pact. In my gloss: You, economists, study value; we, the sociologists, will study values. You will have a claim on the economy; we will stake our claim on the social relations in which economies are embedded.

David Stark in the book "The Sense of Dissonance: Accounts of Worth in Economic Life."

The modern divide between the natural world and the social world has the same constitutional character, with one difference: up to now, no one has taken on the task of studying scientists and politicians in tandem, since no central vantage point has seemed to exist.

Bruno Latour in the book "We Have Never Been Modern."

Abstract

The recent financial crisis of 2007-08 was a watershed moment in the history of banking. The unprecedented event caused severe scrutiny by governments, regulators and standard setters on how the business of banking is run. As a result of the strict scrutiny, a wide variety of reforms aimed at the second (risk management) and third (internal audit) line of defense ensued globally. These reforms involved a variety of actors and not only affected the institution of risk management and internal audit standards, but also their implementation in banks. Motivated by these contemporary events, this thesis examines the institution and implementation of the second and third line of defense in the banking sector.

Through the three exploratory field studies, the thesis posits two important contributions. First, the thesis highlights the changing notions of risk measurement and internal audit in the banking sector. More specifically, the thesis (in Paper II) shows how non-convergence of operational risk practices forced regulators to change their activity and detail oriented advanced approach of risk measurement that (unintentionally) allowed the variation to flourish. In a similar vein, the thesis (in Paper III) demonstrates how the extension of internal audit to the non-tangible domain of “risk culture” raises doubts on the notion of “verification” and “control” attached to the practices of internal audit. Second, the findings indicate the different participation approaches of various stakeholders in the transformation of the second and third line of defense. Here, the thesis (in Paper I) demonstrates the separation and mixing of technical information and political rhetoric by the different stakeholders in instituting the liquidity risk standards. On the issue of internal audit of the Basel risk models (in Paper IV), the thesis demonstrates the filtering approaches of multiple institutional demands by the internal organizational conditions that enable full or partial agency of low-level internal auditors.

Given the findings, the thesis explicates two important implications for practitioners. First, the findings of the thesis indicate that reformulations of risk management and internal audit would require standard setters, regulators, and practitioners in understanding a balance between what to control and whom to empower. Second, organizations need to carefully design what level of freedom to be given to internal audit and risk control teams and how to manage complex institutional demands through organizational structure and skilling initiatives.

Keywords: internal audit, risk management, risk culture, Basel models, operational risk, liquidity risk

Sommario

La recente crisi finanziaria del 2007-08 ha rappresentato un momento spartiacque nella storia del settore bancario. L'evento senza precedenti ha indotto il rigido scrutinio da parte di governi, regolatori e organismi deputati alla definizione di standard sulla gestione del business bancario. Come risultato del rigido scrutinio, si sono susseguite globalmente un'ampia varietà di riforme, volte alla seconda (gestione del rischio) e terza (internal audit) linea di difesa. Queste riforme hanno coinvolto una varietà di attori, influenzando non soltanto le istituzioni deputate alla definizione degli standard per la gestione del rischio e l'internal audit, ma anche l'implementazione di tali standard all'interno delle banche. Motivata da questi eventi contemporanei, la tesi esamina le istituzioni e l'implementazione della seconda e terza linea di difesa nel settore bancario.

Attraverso tre studi empirici di tipo esploratorio, la tesi offre due importanti contributi. In primo luogo, evidenzia le mutevoli nozioni di misure del rischio e internal audit nel settore bancario. Più specificatamente, la tesi (nel Paper II) mostra come la mancata convergenza delle pratiche per la gestione del rischio operativo forzi il regolatore a cambiare l'attività e l'approccio orientato ai dettagli delle misure di rischio, che (inintenzionalmente) hanno consentito alla variazione di prosperare. In modo analogo, la tesi (nel Paper III) mostra come l'estensione dell'internal audit al dominio non tangibile del "cultura del rischio" aumenti i dubbi inerenti le nozioni di "verificazione" e "controllo" associate alle pratiche di internal audit. In secondo luogo, i risultati mostrano i differenti approcci partecipativi dei vari stakeholder nella trasformazione della seconda e della terza linea di difesa. Dunque, la tesi (nel Paper I) dimostra la separazione e il mix delle informazioni tecniche e della retorica politica dei diversi stakeholder nell'istituzione degli standard per la gestione del rischio di liquidità. In merito al problema di internal audit dei modelli di rischio Basilea (nel Paper IV), la tesi dimostra gli approcci di filtraggio delle molteplici richieste istituzionali da parte delle condizioni organizzative interne, che abilitano la completa o parziale agenzia degli internal auditor di livello inferiore.

Considerando i risultati, la tesi rivela due importanti implicazioni per i practitioner. In primo luogo, i risultati della tesi indicano che le riformulazioni della gestione del rischio e dell'internal audit richiedano che gli organismi deputati alla definizione degli standard, i regolatori e i practitioner definiscano un equilibrio tra cosa debba essere controllato e chi vada responsabilizzato. In secondo luogo, le organizzazioni devono progettare attentamente il livello di libertà da dare alle funzioni di internal audit e ai team di controllo del rischio, e come gestire le complesse domande istituzionali per mezzo della struttura organizzativa e delle iniziative di skilling.

Parole chiave: revisione interna, gestione del rischio, cultura del rischio, modelli di Basilea, rischio operativo, rischio di liquidità

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1. Introduction and Research Questions

The distrust of the banking business rose to an alarmingly high level, especially in the aftermath of the financial crisis of late 2000 (Barth, Caprio, & Levine, 2005; Baud & Chiapello, 2016; Froud, Tischer, & Williams, 2017). In this regard, the financial crisis represents the tipping point that brought a marked turn in the attitude of not only the governments, standard setters and regulating bodies, but also the members of the general society (Baud & Chiapello, 2016; Marti & Scherer, 2016; Wahlström, 2009). Therefore, several governments established various committees to investigate the problems with the banking sector. One of the most famous of these committees, known as the Turner committee, highlighted the persistent problems with the issues of control in the banking sector (Turner, 2009). The persistent problems and the institution of various committees prompted the regulators and standard setters, to investigate mechanisms for tighter control of banks (Baud & Chiapello, 2016; Wahlström, 2006, 2009). Consequently, the standard setters and regulators initiated widespread reforms on exerting more control fueling cacophonous debates on various aspects of control in the banking business among several stakeholders (Baud & Chiapello, 2016; Palermo, Power, & Ashby, 2016). The rush to strengthen the control in the banking business translated explicitly into fortifying the second (risk management) and third (internal audit) line of defense¹. For example, introduction of the Basel III reforms by the Basel Committee on Banking Supervision and extension of internal audit to the domain of non-tangible risk culture by the Financial Stability Board and the Institute of Internal Auditors (Acharya, 2009; Carretta, Fiordelisi, & Schwizer, 2017; Langley, 2013; Marti & Scherer, 2016; Palermo et al., 2016; Wilson, Casu, Girardone, & Molyneux, 2010).

Translated in the organizational context, both second (risk management) and third (internal audit) line of defense represent a logic of control to curb excessive risk-taking (Ashby, Palermo, & Power, 2012; Palermo et al., 2016). While risk management represents a logic of control, where measurement allows identification, monitoring, and control on the optimum and appropriate level of risk taking (Curran, 2015; McGoun, 1995), the internal audit represents a logic of control, where assurance on all control systems and processes within organizations represents a kind of “control of the control” (Maijoor, 2000; Mihret, 2014; Power, 2000). Apart from the logic of control, risk management and internal audit also assist banks in implementing a logic of opportunity by facilitating better decisions to find

¹ Three lines of defense is a model of governance propounded by the Institute of Internal Auditors and accepted by the regulators such as the Basel Committee and the European Banking Authority (Chambers & Odar, 2015; Roussy & Rodrigue, 2016). The model presents a governance framework organized around three lines of defense. The operational and managerial functions are depicted as the first line of defense. Risk Management and other control functions are depicted as the second line of defense. Internal audit is depicted as the third line of defense.

“appropriately risky” opportunities for profit-making and creating value (McGoun, 1993; Palermo et al., 2016).

Ideally, the logic of control and the logic of opportunity should be balanced in the banking organizations for them to function properly. However, contrary to the expectation, the recent financial crises (and studies of the banking sector during the financial crisis), affirm that the logic of control and logic of opportunity are not working in tandem (McGoun, 1993; Palermo et al., 2016). While some scholars dub it as the failure of both - risk management and internal audit, others blame it on either of the two (Huber & Scheytt, 2013; Lenz & Sarens, 2012; McGoun, 1993; Power, 2004, 2009).

Empirically motivated by the contemporary post-crisis structural (regulatory) and organizational debates on second (risk management) and third (internal audit) line of defense, this thesis explores the regulatory reforms at the structural and implementations at the organizational level of both types of defense within the Banking sector. The practical reason for selecting both the control practices is twofold. First, both the control practices were undergoing recent changes after the financial crisis. Second, contemporary changes in both the control practices were intertwined with each other.

The story of the two control functions, Internal Audit and Risk Management, has been quite intertwined since the 1980s (Chambers, 2014; Chambers & Odar, 2015; de Zwaan, Stewart, & Subramaniam, 2011; Parker & Johnson, 2017; Spira & Page, 2003). However, both the control functions have originated and evolved at many different sites and organizations. For example, internal audit originated as a re-performance tool for organizations recommended by the American Institute of Certified Public Accountants and the Institute of Internal Auditors in the 1940s (Parker & Johnson, 2017; Spira & Page, 2003). Later, it evolved to be intertwined with several control processes, such as internal control, risk management and corporate governance within organizations by the efforts of the professional organizations (Institute of Internal Auditors) (Parker & Johnson, 2017; Roussy & Brivot, 2016), standard setters (the Committee of Sponsoring Organizations of the Treadway Commission - COSO)(Hayne & Free, 2014) and regulatory initiatives (Sarbanes-Oxley Act and similar standards propounded in the different countries) (Naiker & Sharma, 2009).

In a similar vein, risk management evolved in academia in the early 20th century to represent future problems in mathematical terms (McGoun, 1995) and later developed at financial organizations driven by their desire for packaging risks for profiteering (Curran, 2015). However, the push from regulatory institutions in the last quarter of the 20th century meant that risk management became an essential part of organizational jargons of control and got intertwined with internal audit, internal control and corporate governance in general (Baud & Chiapello, 2016; Marti & Scherer, 2016; Wahlström, 2006,

2009). In the context of the banking domain, the Basel Committee on Banking Supervision played a crucial role in reforming the risk management frameworks since its institution in 1974 (Goodhart, 2011).

Another most striking features of the two control functions, internal audit and risk management, has been their reactive evolution at the structural (regulatory and normative) level. The reactive evaluation has mainly been driven by a recurrent spate of organizational scandals and financial crises (Baud & Chiapello, 2016; Carcello, Hermanson, & Raghunandan, 2005; Chambers, 2014; Chambers & Odar, 2015; Hayne & Free, 2014; Spira & Page, 2003; Wahlström, 2006). For example, corporate scandals in the last four decades promoted reforms in the internal audit, internal control and corporate governance framework by the committees of the United States (COSO) and the UK governments (Hampel, Rutteman, and Cadbury) to strengthen the control systems (Chambers, 2014; Chambers & Odar, 2015; Spira & Page, 2003). These approaches provided impetus to the COSO to transform its internal control framework of 1992 to the enterprise risk management framework of 2002 (Hayne & Free, 2014). In a similar vein, risk management has been evolving due to financial crises (Baud & Chiapello, 2016; Langley, 2013; Marti & Scherer, 2016; Wahlström, 2006, 2009). For example, the early 1970's Bankhaus Herstatt failure of West Germany and Bretton Wood system failure of currency exchange saw emergence of the Basel Committee on Banking Supervision in 1974 which first promulgated self-regulation (Barth et al., 2005; Goodhart, 2011) and later after several financial crises (for details see database by Laeven and Valencia 2012) embarked on a path to tighten the risk control frameworks in 1988 (Baud & Chiapello, 2016; Wahlström, 2006, 2009).

Due to the contextual evolution (a kind of fragmented² institutionalization (Pache & Santos, 2010)) at several places of organizational and regulatory sites (Cooper & Robson, 2006), both the control practices are institutionally fragmented in nature (Arena & Jeppesen, 2009; Arena & Sarens, 2015; Hayne & Free, 2014; Huber & Scheytt, 2013). Thus, their evolution represents what Abbott (1995) termed a collection of different "things within boundaries." For example, Parker and Johnson (2017) point to the differing involvement of the Institute of Internal Auditors and other key players (such as the American Institute of Certified Public Accountants) in the USA during the evolution of internal audit practices. Spira and Page (2003) study the historical development of internal audit and its intermingling in the UK with the corporate governance because of several government committees, such as the Hampel, Rutteman, and Cadbury. Hayne and Free (2014) unravel the story of the transformation of

² In line with Pache & Santos (2010), I use the term "fragmented institutionalization" in the context that the institutional prescriptions are not coherent and thus impose contradictory demands and requirement on actors embedded in such fields.

the internal control framework of 1992 to the Enterprise Risk Management framework of 2004 by the Committee of Sponsoring Organizations of the Treadway Commission. Though the differences in the Basel risk model regulatory frameworks are not as stark as internal audit, yet due to Basel Model's flexibility, their implementation varies in different countries and depends on individual country regulators and supervisors (Kudrna & Puntsher Riekman, 2018). Due to the involvement of multiple stakeholders and multi-site contextual evolution, both the practices are weakly professionalized as well (for internal audit see --Arena and Jeppesen 2009; Covalleski et al. 2003; Hayne and Free 2014; Rittenberg and Covalleski 2001; for risk management see -- Hall et al. 2015).

Because of the fragmented institutionalization and weak professionalization, today both the control practices of internal audit and risk management represent a variety of rationales and meaning in different countries. For example, Roussy & Brivot (2016) show different conceptions of internal audit quality among external auditors, Institute of Internal Auditors, audit committees, and internal audit professionals. Collier and Zaman (2005) and Brown et al. (2014) point to two different approaches of practices in internal audit and control in different countries: "comply and explain" (in Italy and Sweden and the UK) and mandatory (in the US). Kudrna and Puntsher Riekman (2018) show tighter local risk management regulations on capital adequacy and liquidity in eleven post-soviet countries compared to others European Union Member States.

Despite fragmented institutionalization and weak professionalization, the COSO framework promoted by the Institute of internal auditors (Chambers & Odar, 2015; Parker & Johnson, 2017; Spira & Page, 2003) and the Basel framework promoted by the Basel Committee on Banking Supervision (Baud & Chiapello, 2016; Marti & Scherer, 2016) have emerged as leading standards in the internal audit and risk management domain respectively. However, both these frameworks are broad in nature and allow a certain degree of flexibility in their implementations (for internal audit see -- Burnaby et al. 2009; for risk management see -- Roussy and Brivot 2016; Wahlström 2009). The prominence of these frameworks has been one of the principal reason for selecting them for investigation as a part of this thesis.

The fragmented institutionalization and weak professionalization of the control practices of internal audit and risk management have also meant that both the control practices of internal audit and risk management have been implemented differently in different organizations (for internal audit see -- Arena and Jeppesen 2015; Arena and Sarens 2015; Lenz and Sarens 2012; Sarens 2009; for risk management see --Arena et al. 2010, 2017, Mikes 2009, 2011; Soin and Collier 2013). Several studies are highlighting the disparity of the practices at the organizational level as well. For example, Arena

and Jeppesen (2015) show dominance of one of the three approaches of European Union fund related internal audit activities in three different regions of Italy: assurance and consulting, compliance, and specialized activities. Similarly, Mikes (2009) shows two different risk management approaches: risk management by envisioning and risk management by numbers, in various banks in the UK.

1.1. Purpose and research questions

Moving from the motivations and considerations discussed above, this thesis aims to contribute to the understanding of the process of institutionalization of control mechanisms in banks in the aftermath of the financial crisis. To achieve the aim mentioned above, I have selected two contemporary elements of control – second line of defense (risk management) and third line of defense (internal audit) which were undergoing contemporary changes in the financial domain. These control functions were also selected because both of the control functions have developed intertwined with each other in the last two decades (Chambers & Odar, 2015; Hayne & Free, 2014; Spira & Page, 2003). Hence, more specifically, the institutionalization of the two control practices translates into two research questions mentioned below:

1. **How are risk measurement approaches instituted³?**
2. **How are internal audit approaches instituted?**

To study the institutionalization of the control functions, I also selected three contemporary empirical changes on the structural (regulatory) level. Though there have been a number of studies on the evolution of the control practices in banking sector at the structural level (cf. Kudrna and Puntscher Riekmann 2018; Spira and Page 2003), limited attention has been given to *contemporary* changes on the control mechanisms of banking system on the structural and regulatory level that have ensued in the aftermath of the financial crisis and represents a significant shift moving from deregulation and self-regulation regimes to reregulation and tightened regulation (cf. Baud & Chiapello, 2016; Wahlström, 2009). Consequently, I chose liquidity and operational risk measurements that were changing due to the Basel III⁴ and post-Basel III reforms. Liquidity risk was getting tightened (See paper I for more details) and standardized whereas the operational risk was being detached from the actual operational activities. The Basel Committee was abandoning advanced models of operational risk since the advanced models failed to bring harmonization to the banking practices (see Paper II for more details).

³ I use the term "instituted" as defined in the Oxford dictionary - introduce or establish (a law, a standard, or policy). One of the reasons for using this term is that my investigation of risk management and internal audit focuses on the establishment of the laws and/or the standards.

⁴ Initiated after the financial crisis.

Similarly, contemporary post-crisis structural extensions of internal audit, that were promoted by a slew of stakeholders including the standard setters, and consultants- such as risk culture audit (See paper III for more details) (Ashby et al., 2012; Palermo et al., 2016; Ring, Bryce, McKinney, & Webb, 2016) were selected to study the institutionalization of internal audit. The internal audit of risk culture was worth investigating since internal audit extensions prior to risk culture were linked to processes with tangible boundaries whereas internal audit of risk culture represented a non-tangible object of audit that spanned beyond all process and protocols to the domain of behavior and conduct of employees (see Paper III for more details). As Power (1999) explained the tangibility of process allowed auditors to find objective evidence for verification by traceable data points. However, risk culture audits represented a situation where such existing management system boundaries were unavailable. Furthermore, as pointed out by Cooper and Robson (2006), there is a shortage of studies at the different sites of the evolution of accounting practices. Especially in the field of banking, there aren't many organizational studies on the internal audit of risk management models and processes (Roussy, 2015; Roussy & Rodrigue, 2016). Hence, I also added a third research question to investigate the internal audit in the context of banking domain:

3. How are internal audit approaches applied to the risk models and processes in banking organizations?

For highlighting and obviating the contributions of this thesis, I have organized this compilation essay in six different sections. Following this introductory section, Section 2 elaborates on the theoretical background of the study. This section starts by elucidating the state-of-the-art of research on the internal audit and risk management. In doing so, this chapter introduces the theoretical framework of this thesis. Section 3 discusses the research strategy, data collection and data analysis approaches of the overall dissertation as well as the three studies that are part of this thesis. Section 4 summarizes the results of the four appended papers along with their contribution. Section 5 concludes the thesis and paraphrases its contribution to theory as well as practice. In Chapter 6, avenues for future research are highlighted.

2. Theoretical approach

As explained above, this thesis looks explicitly into the phenomenon of institutionalization and implementation of internal audit and risk management in their social and institutional context. To achieve this, like other accounting studies in the social and institutional context, this thesis relies on theories from sociology (Baxter & Chua, 1998; Gendron & Bédard, 2006; Hopwood, 1987, 1990). Specifically, on a theoretical level, different theoretical concepts from three theories, Actor-Network

theory, Foucault's genealogical theory, and Institutional logics, in accounting are utilized to form a loosely coupled "theoretical bricolage" (Boxenbaum and Rouleau 2011). As suggested by Roussy (2015) and Boxenbaum and Rouleau (2011), the application of "theoretical bricolage" is justified in the context of internal audit and risk management because these phenomena remain underexplored in the banking domain.

Mixing of different theoretical paradigms has been criticized by Modell (2009, 2010, 2015) where different epistemological and ontological underpinnings of different theories make them incompatible on the assumption level. However, at the same time, there is a contrary prevalent viewpoint in accounting, where scholars such as Laughlin (1995), Llewellyn (1996), Malmi and Brown (2008), Malmi and Granlund (2009), Roslender (2013), and Vaivio and Sirén (2010) argue in favor of a mid-range theory to address the practice based phenomenon of accounting. Arguing for mid-range theory, these scholars suggest that theoretical thinking should be left to sociologists and practice-based fields such as accounting should focus on generating rich insights for practitioners. These scholars see epistemological and ontological differences as "not that important" for accounting scholars. Boxenbaum and Rouleau (2011) go a step further when they argue in favor of bricolage by saying that such approaches are equally useful in science because they *"produce new knowledge through improvisation rather than through adherence to a specific theory, method, or paradigm."*

Concerning what specific theoretical concepts are applied, there are mainly three theoretical concepts. First, to understand the phenomenon of standard setting of the second line of defense (risk management), the thesis uses the concepts of framing and overflowing (Berker, 2011; Callon, 1998a; Vinnari & Skærbæk, 2014) from the actor-network theory (ANT) in the empirical contexts of liquidity and operational risk measurement. Second, to understand the phenomenon of standard setting of the third line of defense (internal audit), the thesis uses the Foucauldian concepts of programmatic rationale and technologies of implementation (especially boundary creation, data collection approaches, and audit indicators) (Burchell, Gordon, & Miller, 1991; Foucault, 1988; Miller & Rose, 1990, 2008; Rose, 2004) in the empirical context of risk culture. Third, to understand the implementation of the third line of defense (internal audit), the thesis uses an institutional logic (Friedland & Alford, 1991; Thornton & Ocasio, 2008; Thornton, Ocasio, & Lounsbury, 2012) based framework in the context of its application to Basel risk model and processes. Here, specifically the institutional complexity (cf. Binder, 2007; McPherson and Sauder, 2013; Palermo et al., 2016; Smets et al., 2015) and embedded nature of agency (Emirbayer & Mische, 1998; Smets & Jarzabkowski, 2013) are utilized to explore different implementations of internal audit of Basel risk models and processes. The theoretical bricolage explained above was useful in examining the underexplored phenomenon of

internal audit and risk management in the context of the banking domain. The first two concepts framing/overflowing and rational/technique applied at the structural level show how institutions (of control – internal audit and risk management) are changed. The second set of concepts borrowed from institutional logic show how institutional pressures shape actor behavior in implementation (of internal auditors in applying internal audit to risk models and processes).

There have been many studies and scholars in accounting who have justified the mixing of institutional logic and ANT (Modell, 2015) as well as the mixing of institution theory and Foucault (Armstrong, 1994; McKinlay & Pezet, 2010). In most of the cases, scholars have chosen to mix institutional logic and ANT to understand changes of institutions and their impact on practices. ANT allows studying the micro process of transformation of institutions and practices (Modell, 2009, 2015). Similarly, in most cases, scholars have mixed institutional theory and Foucault to study the origin of institutions. Foucauldian perspectives allow the study of institutional changes by linking to regimes of thought and discourses associated with those regimes of thought (Armstrong, 1994; McKinlay & Pezet, 2010). In summary, my theoretical bricolage ignores warnings on the epistemological and ontological incompatibility of theories in favor of practice-oriented research in accounting, yet the mixing of theories is based on accounting traditions and rationales of prior studies on the institutionalization of accounting.

I utilize the concept of framing and overflowing to unravel the enactment of liquidity and operational risk measurement practices. The central theoretical idea of framing and overflowing was developed by Callon (1998) to explain the fact that many black boxes of practices look perfectly framed like a drama on stage and seem entirely isolated from the external world. Callon (1998) argues that this framing seems obvious but is not true. He further contends that even enactment of drama on stage relies on language, professional dramatic training and practice, and understanding of actors that are always there in the background to make the drama look perfect.

Consequently, it could be argued that practices do not exist in isolation and may look framed, but are always connected to overflowing frames (Callon, 1998a; Vinnari & Skærbæk, 2014). I used this theoretical concepts because like Callon (1998); Vinnari & Skærbæk (2014); and Callon, Lascoumes, & Barthe (2009) the intention of the research was to look at how the new and seemingly innovative risk measurement approaches that were instituted as an accounting device arose from refinement of the already practices existing at banks. Furthermore, I also utilized Instrumental information and political rhetoric as two analytically dichotomous concepts to explain their intertwined nature during the framing of accounting devices of risk measurement. Here, I again banked on one of the basic premises of the ANT that it is pragmatically impossible to separate political from the technical (Callon, 1998b;

Latour, 1988). In fact, ANT based studies tell the contextual story of enactment of standards using the concept of political and technical (Christensen & Skærbæk, 2010; Skaerbaek & Christensen, 2015; Young, 2014).

I utilize the concept of programmatic rationale and technologies from the Foucauldian genealogical theory (Foucault, 1988; Miller & Rose, 1990; Rose & Miller, 1992) to understand the regimes of thought (Dean, 1999; Rose, 2004) on the extension of internal audit to the domain of risk culture. These theoretical concepts were selected because they provided a broad conceptual framework to conduct an exploratory inductive analysis on the issue of internal audit of non-tangible risk culture and multiple regimes of thought prevalent among various stakeholders. Another reason behind the selection of these concepts was to highlight the genealogical advent of the rationales of the internal audit that were grounded in already existing conceptions and discourses of internal audit among the various actor-groups.

I utilize the concept of institutional complexity (cf. Binder, 2007; McPherson and Sauder, 2013; Palermo et al., 2016; Smets et al., 2015) and embedded nature of agency (Emirbayer & Mische, 1998; Smets & Jarzabkowski, 2013) to understand the implementation of internal audit of risk management models and processes in three European banks. The theoretical underpinnings of institutional complexity were selected because internal audit and risk management represent a complex arrangement of institutional logics in the banking domain (Arena & Jeppesen, 2015; Palermo et al., 2016). In this way, the internal audit of risk model and processes represent a situation where banks have to deal with multiple institutional pressures.

3. Methodology

This section elaborates on the overall research approach followed by details of the investigation of the three research question concerning the three crucial methodological focal points: research strategy and case selection, data collection, and data analysis. Finally, some quality issues of the overall thesis and compilation essay are discussed.

3.1. Overall Research Approach

At the empirical level, three⁵ **qualitative, and explorative field-studies** (Study A, B, and C) were conducted to investigate the research questions (RQ1, RQ2, and RQ3). The output of the research are

⁵ Paper II relies on the extension of study A. See Table 1 (on page 11) for details.

reported in four appended papers (I, II, III and IV). Table 1 (on page 11) links the studies with the research questions and the articles. Table 1 also provides further details on the method, theoretical perspective, research purpose and the links the papers to the compilation essay's research questions.

Contemporary control functions of internal audit and risk management in banks are very pragmatic and practice driven phenomenon. Keeping this in mind, this study was driven by four scholarly viewpoints that formed the backbone of the research strategy for this project. First, the overall research design was guided by the arguments of scholars such as Laughlin (1995), Llewellyn (1996), and Roslender (2013) on practice-driven research in accounting where they argue for balancing theory and context-specific pragmatic explanations by finding a middle ground between theory and practice. Consequently, the goal of the research design was not only to generate appropriately generalizable theories but also to offer some suitable explanations of the specific practice. Second, data collection strategy was guided by the ideas of Malmi and Granlund (2009) & Vaivio and Sirén (2010) where they argue that practice driven fields such as accounting should rely on a plurality of data collection techniques because a plurality of techniques is used for generating an appropriate and pragmatic understanding of the accounting phenomenon. Third, data collection was influenced by scholars such as Latour (1988, 1993) and Callon (1986) where they argue that the practices should be illuminated by following the actors and their networks. Fourth, data analysis was influenced by the views of scholars such as Gergen and Gergen (2007), Berger and Luckmann (1966), and Jönsson (1991) where scholars argue that practice-based research should strive towards the pragmatic understanding of the knowledge where knowledge is assumed to be socially constructed and reside in the community of practice.

The four above-mentioned influencing scholarly viewpoints led to a **qualitative field-based** approach as an overall research strategy to understand the practices of control functions (internal audit and risk management) in action. In addition, all the field-based studies of this thesis utilized exploratory **multi-stakeholders'** perspective. Moreover, since the research focused on understanding control practices in action, the research questions of the proposed study were formulated in terms of "how" (Edmondson & Mcmanus, 2007; Yin, 2003). The choice of research question formulation in terms of "how" and qualitative field-based approaches accommodating multi-stakeholders perspectives were in line with the majority of qualitative researchers in management accounting (cf. Lee and Humphrey 2006, Englund et al. 2013).

Table 1: Summary of the appended papers

Paper	Research Questions of The Specific Papers	Processes of Concern	Unit of Analysis	Study	Methodology	SRQL*
I	How are (liquidity) risk measurement approaches instituted (in the banking domain)?	Standard-setting - Risk Measurement	Organizations (Regulators, Consultants, Lobbying Organizations, Banks)	Study A	Qualitative	Risk Measurement (liquidity) – SRQ1
II	How are (operational) risk measurement approaches instituted (in the banking domain)?	Standard-setting - Risk Measurement	Organizations (Lobbyists, Banks)	Extension of Study A	Qualitative	Risk Measurement (operational) – SRQ1
III	How are internal audit approaches (for risk culture) instituted (in the banking domain)?	Standard-setting -Internal audit	Organizations (Regulators, Consultants, Lobbying Organizations, Banks)	Study B	Qualitative	Internal Audit of Risk Culture – SRQ2
IV	How are internal audit approaches applied to the risk models and processes in banking organizations?	Implementation - Internal audit	Basel Internal Audit Units/Auditors	Study C	Qualitative	Internal Audit of Risk Management – SRQ3

* SRQL - Sub Research Question Link

As highlighted earlier in the introduction section, for all the field-based studies, empirical criteria were deployed to select what to study. The main criteria to select the studies was their contemporary nature of change post the financial crisis of 2007-08. Thus, changing control functions, internal audit and risk management were selected. viz., liquidity and operational risk measurement, internal audit of risk culture and internal audit of Basel models and processes. Both internal audit and risk management were selected since both the control functions have developed intertwined with each other in the last two decades (Chambers & Odar, 2015; Hayne & Free, 2014; Spira & Page, 2003).

Furthermore, the selection of studies had some opportunistic elements (Baxter & Chua, 1998; Baxter & Fong Chua, 2008). The opportunistic element implied that the choice of what to study was also guided by the empirical accessibility and interest from the practitioners to participate in the study. The motivation for studies in banking risk management and internal audit was also drawn from my own prior experience of working in the banking domain as a consultant.

The thesis had an abductive design⁶ (Alvesson & Sköldberg, 2009; Yin, 1981). The adoption of abductive design meant that all the studies started with some reading of accounting literature as well as contemporary pragmatic problems of banking risk management in news, articles and regulatory websites. The abductive design also meant *apriori* formulation of some broad guidelines or subjects for data collection (e.g., liquidity risk, operational risk, internal audit of the Basel models or risk culture).

Regarding actual data sources, the studies of this thesis relied on multiple sources: verbal such as semi-structured interviews; as well as non-verbal such as private documents shared by the informants and the historical archival public documents and artifacts on the specific applications of risk management and internal audit. The use of multiple data sources helped in the empirical triangulation of facts (Eisenhardt & Graebner, 2007; Yin, 1981). It also allowed a *faithful* reporting of the storyline (Modell, 2009, 2015). Access to data in fields like banking is always restricted either due to regulatory hurdles on data security (Mikes, 2011; Palermo et al., 2016) or unwillingness of actors to share detailed accounts (Wahlström, 2006). Consequently, to overcome the limitations of data accessibility, continuous analyses during the thesis were used to focus on specific areas for data collection. In this regard, the anonymity assurance also allowed a certain degree of faith to informants in being open.

Semi-structured interviews enabled in bringing practical approach of the **multiple stakeholders** to the fore and in reducing interviewer bias of certainty based on the *apriori* theoretical understanding that might have affected the results more if it were to be carried out in a structured and hypothetic-deductive way of rigid questionnaires. Informant biases during the interviews were tackled in many ways. First, information received from the interviewees were triangulated through other available public documents or documents shared by the interviewees (Norris, 1997). Second, the assurance of anonymity to the interviewees helped in getting better responses (Miles & Huberman, 1984). Third, the interviews mostly addressed recent activities, which were still going on in the organizations, that enabled reduction of retrospective recall bias (Miles & Huberman, 1984). Informal coffee talks and face-to-face interviews made the gathering of information and data possible that could not have been possible through mere informal interviews.

Regarding the epistemological standpoint, this thesis and its studies looked at the reality from the interpretive perspective (Alvesson & Sköldberg, 2009; Bryman, 1984; Flyvbjerg, 2006; Yin, 2003) where

⁶ Individual papers may have predominantly inductive design (Paper I, II and III) where empirical understandings and historical storyline informed the theoretical constructs. What I mean by predominantly inductive design is more independence from deductive theoretical understanding during data collection.

it assumed that the researcher interacts with the complex reality during its interpretation. Consequently, the data analysis approaches mostly relied on interpretation in the broader historical and social context (cf. Miller and Power 2013). The interpretation also took into account the different actor groups considering the assumption highlighted above that knowledge is assumed to reside in the community of practice (Brown & Duguid, 1991; Carlile, 2002). The interpretations relied on reading and re-reading of texts by the authors and co-authors several times during and after the data collection, which resulted in a more faithful representation of results. Several rounds of feedbacks from people who did not participate in data collection, such as supervisors (also co-authors of papers) and discussants and audience at internal seminars and external conferences, helped reduce my own biases during the interpretation and reporting.

3.2. RQ1: How are risk measurement approaches instituted?

Case Selection and Research Strategy

The first study is concerned with the institution of liquidity and operational risk measurement techniques. The study on liquidity risk measurement relied primarily on the data from the Swedish banking sector. There were several reasons for this selection. First, owing to its limitations in size, Swedish banking sector is concentrated, and is dominated by a small number of large banking organizations (Riksbanken, 2013), which made it easy to identify and interview different actors. Second, Sweden is prominently ranked on the transparent government and e-governance initiatives in the world (United Nations, 2015), which helped in getting access to the public documents. Third, the research project relied on the possibility to gain access to data in a closed field such as banking and financial domain (Baxter & Chua, 1998), where the Ph.D. student's location in Sweden made it easier to approach actors and interview them. Moreover, the choice of the Swedish case for the study was not based on any 'theoretical sampling,' or any a priori assessment of whether the banking systems would provide an appropriate context-rich data (Baxter & Chua, 1998). The research project was also not pre-constructed through any standard theoretical framework in place.

In the Swedish banking system, risk measurement practices are guided by multi-layered standards and regulations (Bhattacharya & Thakor, 1993; McGoun, 1995; Schooner & Taylor, 2010). For example, Swedish banks are influenced by global (the Basel standards), European (European Union laws and directives), as well as national standards and regulations (Bouwen, 2004). More specifically, the study covered the enactment of a short-term measure of liquidity: referred to as the "Liquidity Coverage Ratio (LCR)." This measurement approach was introduced in 2009 by the Basel Committee and influenced the subsequent European laws and directives issued by the European Banking Authority (EBA). The central bank (Sveriges Riksbank) and the financial supervisory authorities

(Finansinspektionen - FSA) pushed for tighter deadlines and stricter regulations than most other European nations did after the financial crisis of 2007-08, despite the Swedish banks' better performance compared to other European banks (Goddard, Molyneux, & Wilson, 2009). This tighter control provided a contested environment to study political rhetoric and technical information.

In contrast to the Swedish focus of the liquidity measurement study, the extended exploratory study on the institution of operational risk measurement employed the international data elements connected to the Basel Committee and responses from the stakeholders on its guidelines, standards, and other documents. The case of the operational risk measurement was chosen because it represented a unique situation where standard setters, led by the Basel Committee, promoted a more activity-focused approach of collecting frequency and magnitude of losses of operational errors in the beginning and later retracted and simplified the operational risk measurement approach to use a business indicator based on interest, service and financial component of the business. This unique opportunity for the reversal of rhetoric by the standard setters provided a chance to see approach from the standard setters and lobbyists where standards setters succumbed explicitly to lobbyists.

Data Collection

The study followed the actors (non-human and human entities), to bring the relevant story to the forefront. Consequently, the study relied on two primary sources of information: studies of communication documents and interviews with 19 key representatives of the Swedish banking system. The interviewees represented key actors dealing with the Basel based liquidity and operational measurement institution for the Swedish banking system. For example, banks (a large bank, a large corporate bank, and a large export credit provider to small and medium enterprises), major banking associations (a banks' association, and a buy-side analysts' association), major consultants (a major risk management software consulting firm, a major risk management process consulting firm, and a major risk-related accounting consulting firm), and regulators and standard setters (the Basel Committee, the European Banking Authority (EBA), FSA-Sweden). Such types of organizations influence regulation institution processes more than other actors (Bouwen, 2004; Giner & Arce, 2012; Reuter & Messner, 2015; Tutticci, Dunstan, & Holmes, 1994).

The interviews were semi-structured and were 0.5 - 2 hours duration each. All the interviews were recorded with permission from the informants. Apart from the general understanding of the actor's roles and responsibilities and their organization's general structure and functioning, the interviews were predominantly focused on understanding two essential aspects during shaping of new risk measurements. The first aspect focused on the informant's and their organization's interest in the liquidity and operational risk measurement. The questions specifically addressed the motivation for

change or inertia towards change as well as on how the change or status quo will affect organization's business and other interests. The second aspect addressed how do informant's organizations operate and participate in the measurement approaches propounded by the regulators. This was addressed by asking questions about internal organizational structure, the responsibility of members, and processes of production of inscriptions of communication documents aimed at promoting organization's specific interest concerning liquidity and operational risk measurement that shaped risk management. In addition, informants were asked about their network and alliances that they formed with other actors to garner better treatment in the network.

Different actors' websites' advanced search mechanisms, interview transcripts, as well as secondary source readings, were used to find relevant public documents. For the liquidity measurement study, the communication documents for the period 2009-2016 were collected from the websites of the lobbying organizations and regulators. The year 2009 was selected because the Basel Committee introduced the concept of LCR that year. Additional documents of the Basel Committee since its inception were also utilized to create the historical context for the liquidity risk measurement. For the Operational risk measurement study, the communication documents for the period 1980-2016 were downloaded from the Basel Committee website. The lobbying responses from 2010-2016 were downloaded from the Basel Committee website since before 2010; the committee did not publish the responses or reasons for acceptance of suggestions. Even though these documents represent only the "public" aspect of lobbying, they have been considered an essential source of information in previous research (Georgiou, 2010; Weetman, Davie, & Collins, 1996).

Data Analysis

The data collected for the study on liquidity and operational risk measurement were analyzed in several steps. First, the communication and policy documents from the stakeholders (standard setters, regulators, lobbying organizations, consultants, and banks) were organized chronologically. Then the documents were categorized based on four criteria: topic, type, addressed to, date and specific reference/collaboration of actors. After this categorization, extracts and sections relevant to liquidity risk measurement and operational risk measurement were selected from the documents for more in-depth analysis. Similarly, the interviews were transcribed, and relevant sections on liquidity risk measurement and operational risk measurement were selected and categorized for analysis. The result of this primary analysis was the historical background and the case storyline.

In the second step of the analysis, for both study A and its extension, the actors' deployment of technical facts⁷ and rhetoric were identified. In the third step of the analysis, the identified patterns of separation and mixing of technical facts and rhetoric were characterized. This involved identifying repeated patterns of various actors concerning the similarity of rhetoric, facts, and interests. The fourth and final step clustered the recognized approaches of actors and grouped actors into different groups and different persuasive approaches. The similarities (e.g., association with Swedish organizations as well as the European Union-level organizations, similar time periods) and the differences (e.g., different types of focus of different actors, different kind of interests), in the context of the actors, helped in highlighting the different patterns and modes of behavior of actors.

3.3. RQ2: How are internal audit approaches instituted?

Case Selection and Research Strategy

Given the emergent nature of risk culture debates and contextual ambiguities surrounding its internal audit (Cornia, Dressel, & Pfeil, 2016; Palermo et al., 2016; Ring et al., 2016), this study chose a qualitative field-based approach to unravel and classify different emergent ideas inductively. Furthermore, since extant literature on internal audit and risk culture is so scant, which either relates to the contextual production conditions of risk culture problems (Cornia et al., 2016; Palermo et al., 2016), or only regulators viewpoints (Ring et al., 2016), this study chose to explore the internal audit approaches of risk culture in a variety of actor groups.

Apart from contemporary nature of the debate, further motivation for selecting internal audit of risk culture arose from the three underlying challenges in the application of IA to risk culture. First, unlike organizational processes such as risk management where specific protocols, process ownership, and departments provide tangible boundaries for IA (Hall et al., 2015; Mikes, 2009, 2011), risk culture concerns the domain of individual motivations and behaviors beyond all protocols, departments and processes within organizations (Cornia et al., 2016). This raises ethical concerns on how far IA should colonize and control individuals and employees through the IA of risk culture (Ezzy, 2001; McCabe, 2014). Second, the problem of the IA of risk culture is exacerbated by an existing incoherent understanding of risk culture, its production or alteration within organizations (Palermo et al., 2016), and its relationship with the organizational culture (Schein, 1990, 2004). Third, the problem of the IA of risk culture is further amplified by the fact that IA itself is not yet a standardized practice due to its expanding entanglement with different governance processes and a multitude of stakeholder

⁷ In Latourian theoretical paradigm technical cannot be completely separated from the political. However, technical in Latourian analysis generally refers to the figures, facts, numbers and calculative steps posited as facts by the actors.

expectations despite many normative initiatives since 1949 (Hayne & Free, 2014; Spira & Page, 2003). In fact, scholars elaborate on weak professionalization (Arena & Jeppesen, 2009; Covalleski et al., 2003) and disparate IA practices not only among implementers (Jiang, André, & Richard, 2018; Rittenberg & Covalleski, 2001; Roussy & Brivot, 2016) and implementing organizations (Arena & Jeppesen, 2015) but also among normalizers and regulators (Brown et al. 2014; Covalleski et al. 2003). Since banking sector is always first in promulgating risk management, measurement or audit contexts (Baud & Chiapello, 2016), I choose banking sector to highlight the understanding in the internal audit of risk culture.

Data Collection

This study relied on a heterogeneous set of actors to examine their understanding of internal audit of risk culture and governance. The focus was primarily on the internal auditing aspect of risk culture. First, 295 archival documents were selected from regulators (the Basel committee), standard setters (the Financial stability board), professional bodies (the Institute of Internal Auditors, the Institute of Risk Managers) and consulting companies (big four – PwC, E&Y, Deloitte, KPMG and Protiviti) on internal audit and risk culture audit respectively. Protiviti apart from big four was included because it collaborates with COSO and IIA and is one of the most important consulting firms in the field of internal audit.

The archival document analysis was complemented with semi-structured interviews of 20 different actors. Since the phenomenon of risk culture audit is still in its infancy, semi-structured interviews helped in addressing the concerns of the interviewees in a fluid way. The interviews addressed the informants' concern about how they view risk culture and why they think it to be important to be subject to an internal audit. The interviews focused on understanding the informants' and their organizations' approach to internal audit and monitoring of risk culture. Here the focus of the questions was on understanding the systems of audit and approaches to audit and indicators that the informant's and their organizations' proposed. I also asked if interviewees could share the relevant documents and cases and examples during their discussion. The informants were also asked for further references and relevant people in their network to be interviewed.

Data Analysis

To analyze the collected data, all the interviews were transcribed and the archival documents were arranged historically. Later relevant sections of the archival documents and interviews concerning the internal audit of risk culture were identified. Specifically, the sets of sections representing internal audit of risk culture were collected for the four group of actors: regulators & standard setters, Internal Audit and risk professional bodies, consultants, and implementers (risk professionals, internal auditors). Finally, the sections were analyzed for identifying how actors proposed to create a system for internal audit of risk culture (especially, boundaries considering the non-tangible and all-

encompassing nature of risk culture, indicators, and actual approaches of audit). This analysis also involved creating a chronological story in the case of two actor groups: regulators & standard setters, Internal Audit and risk professional bodies.

3.4. RQ3: How are internal audit approaches applied to the risk models and processes in banking organizations?

Case Selection and Research Strategy

The exploratory study on the internal audit of risk models is set in the context of three large multinational European banks having headquarters in Sweden and Italy. More specifically, the study is based on comparative cases (Yin, 1981, 2003) of the three Basel internal audit (Basel-IA) units of the three international financial institutions. The primary criteria for the case selection were empirical (Eisenhardt, 1989; Eisenhardt & Graebner, 2007): **typical** international financial institutions with substantial revenue and operations subject to multiple regulatory regimes, advanced risk model and Basel-IA implementations and availability to share the details of IA processes. Again, opportunism played another role in selecting banks in these countries (Baxter & Chua, 1998). Consequently, the Italian banks were included, because of my mandated mobility to Italy, as a part of the joint Ph.D. from September 2014 to September 2015. Nevertheless, the three banks, selected for this study, were similar in many respects: a large revenue base, large operations, a diversity of activities, international strategic ambitions and a robust risk management approach. It also turned out that their risk management organizations, their expectations regarding the internal audit, and the language they utilized concerning risk and internal audit were comparable too. At a closer look, however, exciting contrasts emerged between the banks. In particular, the personal convictions of the risk model auditors, the organization styles and the techniques and technologies of internal audit differed significantly. Drawing out differences and similarities between banks (Baxter & Fong Chua, 2008; Yin, 1981, 2003) helped the researcher in moving faithfully from empirical material to interpretation and reporting.

Data Collection

The primary data source for this study is the semi-structured interviews with Basel-IA, risk management, internal validation and regulatory compliance teams dealing with the Basel-IA in the three financial organizations. The data collected by interviews were supplemented with the annual reports, pillar III risk reports and corporate governance reports as well as the internal documents (manuals/reports/policy) shared by the interviewees (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Siggelkow, 2007; Yin, 1981, 2003). Some semi-structured interviews with external stakeholders, including one interview with a member of the secretariat, IA-team of the Basel committee and five

interviews with technology, management, IA and accounting consultants to the financial industry helped in the contextual characteristic of the Basel-IA.

In total, 21 interviews with 19 informants were conducted. All interviews lasted 0.5 -2 hours in duration. All interviews were taped and transcribed, except for three. All of the internal organizational interviews were conducted at the client locations. This enabled for observation and informal chat with participants and their colleagues during the coffee break. The interviews with external stakeholders, such as standard setters and consultants, were focused on understanding regulations and their work that affects implementations of the Basel-IA and IA in banking and financial organizations. The consultants were also asked about their involvement with the banking organization in general concerning the Basel-IA and related work. The interviews with the Basel-IA head and team members were focused on understanding the organization of the Basel-IA team, their mode of operation as well as on the regulations and internal organizational mandates that affected their functioning. The interviews with the risk management and compliance team were focused on their involvement with the Basel-IA team and their view on regulations and internal organizational mandate affecting their work in this regard.

Data Analysis

For the data analysis, all the documents and the transcribed interviews were categorized. First, an analysis of the macro-environment of regulations and standards related to the internal audit of Basel models were charted out for the Italian, Swedish and the European level. Later, difference and commonalities of approaches from different regulators and standard setters were identified.

Second, within-case analysis of individual cases was carried out by identifying characteristics of the Basel-IA approaches of the banks (Eisenhardt & Graebner, 2007). Then the study traced how Basel-IA work was organized, distributed and implemented in each case, putting specific focus on why organizations or the Basel auditors selected specific approaches to planning, execution, and reporting. In this regard, the study analyzed Basel-IA approaches of all the three cases and characterized them into different typologies through the available data sources. Finally, the study performed a cross-case comparison identifying similarities and dis-similarities of reasons for homogeneity or heterogeneity of practices and contexts within cases (Eisenhardt & Graebner, 2007). Once these similarities and dissimilarities were identified, possible explanations were envisioned trying to dissociate context from theoretical regularities (Arena & Jeppesen, 2015; Eisenhardt, 1989; Yin, 1981).

3.5. Quality Concerns and their Remedies

Like all other interpretive research approaches, the validity of this research is linked to its analysis (Gergen & Gergen, 2007) and reporting (Baxter & Fong Chua, 2008). However, since this study and its papers side more towards social constructivist and critical perspectives, validity approaches adopted in this thesis are very different from that of the more functionalist approaches in the extant literature (such as Yin (1981, 2003)) (Gergen & Gergen, 2007; Modell, 2015). Though each paper proposes their validity and reliability approaches, here these concepts are discussed concerning the overall thesis perspective.

Before I move on to discuss the validity approaches of the thesis, I would like to highlight again the three important assumptions of this thesis that are inherited because of its theoretical-methodological perspectives and have a bearing on the quality of this thesis. First, knowledge originates in human networks. Second, language is central, and meaning emerges not from some separate objective reality of the world but its discursive and linguistic interpretation, where it is assumed that facts cannot be devoid of politics and values. Third, the idea of social, interconnected and relational processes affect accounting practices, shifting the focus on networks and not on individuals.

Despite a fervent debate on the validity and reliability not being applied to the social constructivist point of views, new methodological innovations are emerging within this approach to provide faith and authenticity to the accounts of scholars (Gergen & Gergen, 2007). This dilemma arises because social constructivist accept that truth or objectivity cannot be separated from the biases of the individuals, actor networks and the researchers'/inquirers' own values. Thus, the social constructivist accepts their writings as biased accounts containing biases from researcher's own values as well as that of informants and actor networks. Validity questions arise in the social constructivist accounts because science, to some extent cannot accept "anything goes" in the scientific writings, just because of the ontological assumption that the truth is quite inseparable from values and biases. Consequently, social constructivist like other interpretative researchers accept that the biases of the informants and researchers during data collection as well as during report writing are not detachable and thereby, try to establish validity by providing **faith** to their accounts by two approaches. First, acknowledging and mitigating the biases and second by multiple-voicing (Gergen & Gergen, 2007).

The first mechanism of bringing the validity of the accounts of this research is the emphasis on reflexivity during reporting of the cases (Alvesson & Sköldberg, 2009; Gergen & Gergen, 2007). Consequently, authors bring contextual, historical or geographical factors of the case or their personal biases to the fore to make the readers aware that they are reading a constructive account and how

these may be biased from either the highlighted contexts or the researcher's biases. Thus, in the methodology of various individual papers, and limitation section in all the studies, I enumerate the biases and contexts in the methodology sections. Furthermore, the writings of this compilation thesis are also performed, as much as possible, in an active voice where I try to introduce my motivations and biases that might have affected the research quality. I also bring historical and geographical understanding in all the papers and studies to bring to the fore the contexts of history and geography and its impact on my accounts provided in the papers or this compilation essay. To some extent to reconstruct the historical and geographical understanding, I also read and reread several times my account of contexts, tracing them to some objective timeline and multiple sources in my collected data.

The second approach adopted in this thesis is the multiple voicing in all the studies where several actor viewpoints are presented (Gergen & Gergen, 2007). This voicing again makes readers aware of richer descriptions of different actors and their accounts. The individual papers of the thesis have taken some input from theoretical viewpoints (such as Institution theory in Paper I and II, Actor-Network Theory in Paper III and Foucault in Paper IV). Use of such theorizations is at least accepted within the constructivist accounting stream where authors try to put some theoretical perspective and sacrifice some descriptions in favor of shortening of accounts (cf. Vinnari and Skærbæk 2014, Young 2014, Skaerbaek and Christensen 2015). These mid-level theorizations are also demanded in practice driven accounting journals (as is the case with this research) since journals accept condensed and synthesized accounts. The operationalization, validity, and reliability of the construct of specific theorizations are discussed in the individual papers where they are used, and thus this section omits such discussions.

4. Presentation of the Appended Papers

This chapter summarizes the four appended papers. The work distribution between the authors for all the four-appended papers is in detail below.

Table 2: Status and Contribution of Papers

Paper	Author(-s)	Research Question	Publication Status
I	Sinha Vikash; Engwall Mats; Kullvén Håkan; Torkel Strömstren	How are (liquidity) risk measurement approaches instituted (in the banking domain)? (Sub Research Question 1)	<i>Previous version⁸ presented at the Academy of Management Conference 2017 at Atlanta, USA</i>
II	Sinha Vikash	How are (operational) risk measurement approaches instituted (in the banking domain)? (Sub Research Question 1)	
III	Sinha Vikash, Arena Marika	How are internal audit approaches (for risk culture) instituted (in the banking domain)? (Sub Research Question 2)	<i>Minor Revision (2nd Round review decision) from Journal of Business Ethics</i>
IV	Sinha Vikash, Arena Marika	How are internal audit approaches applied to the risk models and processes in banking organizations? (Sub Research Question 3)	<i>Under review (2nd Round) in Accounting and Business Research</i>

4.1. Paper I

Title: Standard Setting in Risk Measurement: Framing an Accounting Device

Purpose - The objective of this paper was to understand the institution of liquidity risks measurement standards.

Methodology – The study built on the case of the extension of liquidity risk measurement in the Swedish banking system. The study relied on 19 semi-structured interviews with the key stakeholders of the banking system, along with 200 archival documents. The documents were collected from 2009 to 2015, for the analysis. The year 2009 was selected because the Basel Committee started the liquidity risk reform in the year 2009 as a part of the Basel III framework.

⁸ Abstract Published as Sinha V.K., Engwall, M., Kullvén H. 2017. Emerging Patterns of Purification in Banking Risk Measurement, Academy of Management Proceedings, 2017;, <https://doi.org/10.5465/ambpp.2017.15581abstract>

Findings - The findings, from the case of the extension of the liquidity risk measurement in the Swedish banking sector, suggest that three different modes of behavior characterize the framing of risk measurement extensions. First, the anti-politics *approach* of the standard setters and regulators, where they espoused technical information separately from the political rhetoric. Second, the active politics approach of the banks and the interest organizations, where they embedded the technical information within political rhetoric. Third, the calculative vigilance approach of the consultants, where consultants provided technical information embedded in political rhetoric, but primarily on non-contested topics, where standard setters or regulators explicitly sought information.

These three approaches constituted various degrees of embeddedness of technical information with political rhetoric. The anti-politics approach points to a loose coupling between information and rhetoric. In this mode, political rhetoric merely served the purpose of legitimizing actors' viewpoints, and information was presented decoupled from rhetoric as much as possible to prohibit displacement by other actors. The active-politics and calculative-vigilance approaches, on the other hand, point to the tight coupling of information and rhetoric, exhibited in the tight enmeshing of technical information and political rhetoric. While the active politics approach utilized strong coupling for opposing changes by emphasizing their subjective nature, the calculative vigilance approach used the strong coupling to selectively bring credibility to the consultants work by emphasizing the importance of the information they provided.

Research Implication – The paper extends the techno-political approach by arguing for understanding embedding approaches of technical information along with political rhetoric during the institutionalization of liquidity risk measurement practices through regulation. Thus, instead of looking at demarcation of technical and political (cf. Young 2014), or merely political (cf. Chee Chiu Kwok and Sharp 2005, Reuter and Messner 2015) or just technical and instrumental approaches (cf. Königsgruber 2013) as propounded in the extant literature; the thesis proposes to study both the demarcation as well as intermingling of political rhetoric and technical information. In doing so, the thesis sided with the “new rhetoric” premise that rhetoric could not be understood devoid of its information context. Also, these studies side with the premise of Latour (1988, 1993) and Callon *et al.* (2009) that no facts are devoid of value.

Originality - The novelty of the paper lies in being among few papers in the field of banking risk management to apply techno-political approaches to study institutionalization of risk management standards (focusing on the long-term dynamics and meanings of risk measurement (Arena et al., 2017; Brivot, Gendron, & Guénin, 2017; Jordan, Mitterhofer, & Jørgensen, 2016; Themsen & Skærbæk, 2018)). In doing so, the paper first identifies the three different phases of standard setting and then explicates the different approaches of the interplay of information and political rhetoric in different actors' approaches in the three phases.

4.2. Paper II

Title: Reinventing Operational Risk: Distancing Operational Risk from Operations

Purpose - The objective of this paper was to understand the different techno-political approaches of the institution of operational risks measurement.

Methodology - The paper analyses the publicly available comment letters from the lobbyists, and the standards on operational risk by the Basel Committee on Banking Supervision for a period from 1980 - 2016.

Findings - This paper posits two important contributions. First, it demonstrates how the BCBS and the lobbyists framed the operational risk calculations in four different phases. Second, the results of the different approaches on operational risk calculations demonstrate that like other activity focused accounting instruments (e.g., activity-based costing (Argyris & Kaplan, 1994; Malmi, 1997; Shields, 1995)), the calculation of operational risk allowed a number of different practices leading to non-transparency and non-comparability of operational risk reporting. This led to the withdrawal of the activity focused operational risk calculation by the Basel Committee on Banking Supervision.

Research Implication – One of the main implications of this study is towards understanding how to balance control and freedom while deploying activity focused accounting calculations.

Originality – This paper demonstrates how operational risk practices evolved in four different phases from 1980 to 2016. In doing so, the paper addresses the call for studies focusing on the long-term dynamics and meanings of risk measurement practices (Arena et al., 2017; Brivot, Gendron, & Guénin, 2017; Jordan, Mitterhofer, & Jørgensen, 2016; Themsén & Skærbæk, 2018). The paper also demonstrates that the non-convergence of operational risk practices forced regulators to change their activity and detail oriented advanced approach of risk measurement that (unintentionally) allowed the variation to flourish.

4.3. Paper III

Title: Manifold Conceptions of the Internal Auditing of Risk Culture in the Financial Sector

Purpose - This paper aims to analyze how different actors –standard setters, normalizers, consultants, and implementers – conceive internal audit of risk culture.

Methodology - To address the research question, 185 guideline-related documents and lobbying responses on internal audit and risk culture audit proposed by the Basel Committee on Banking Supervision (BCBS), The European Central Banks and the Financial Stability Board (FSB) were inductively examined. This analysis was further extended by analyzing 47 documents from the Institute of Internal Auditors (IIA), the Institute of Risk Management, The group of thirty, and International Financial Corporation. Additionally, five documents from the implementers and 58 documents by the

big four (PWC, E&Y, Deloitte, KPMG) and Protiviti on risk culture and internal audit were scrutinized and analyzed. The inductive analysis specifically focused on examining the manifold conceptions of the internal auditing (IA) of risk culture in the financial sector of four different actor-groups – regulators, normalizers, consultants, and implementers. This inductive examination of documents was supplemented with private documents and data collected through twenty interviews of standard setters (BCBS, FSB), implementers, normalizers (IIA) and consulting companies (E&Y, PWC, Deloitte, KPMG, Protiviti).

Findings – Findings of this paper suggest that the regulator and implementer’s conceptions of IA on risk culture point towards the strong presence of the rhetoric of control. In contrast, consultants and normalizers conceptions point towards the presence of both the rhetoric of control as well as the rhetoric of empowerment of employees. The paper explains these differences based on the different conceptions of auditing as a governance instrument. While consultants and normalizers, in general, are changing the conceptions of governance towards emergent approach of empowerment of employees, the standard setters, and the implementers still problematize governance with a lens comprising control (Erb & Pelger, 2015; Free, Salterio, & Shearer, 2009; Kaspersen & Johansen, 2016; Pelger, 2016). Furthermore, this paper argues that the normalizers and the consultants are promoting the emergent approach focusing mostly on including direct measurement of risk culture through psychological and behavioral elements where they are in the early stage of a quest for establishing the new conception of the behavioral audit. The implementers, and the standard setters, on the other hand, stick more to adopting a functional approach by including elements of risk culture audit without changing the existing techniques (Power, 1999).

Research Implication – Paper III opens up debate on what could be the future of internal audit if it is extended to non-tangible objects of audit such as risk culture or business ethics. The paper raises concern on how control and empowerment could be balanced in the internal audit of non-tangible objects to avoid the pitfalls of being too intrusive in control and being too lenient in allowing employees to carry out their work.

Originality - This paper contributes to the literature in two ways. First, it delineates a systematic understanding of the manifold conceptions of risk culture and its governance by internal audit. In this way, it complements the existing research on risk culture audit that either relates it to the contextual production conditions (Cornia et al., 2016; Palermo et al., 2016) or only regulators viewpoints (Ring et al., 2016). Second, the paper contributes to calls by several scholars in examining how ‘the idea of audit’ gets extended into new domains (Chua, 1996; Free et al., 2009; Kaspersen & Johansen, 2016; Pentland, 2000). In particular, the paper highlights the challenges and tensions that arise when the object to be audited is far from a transaction or an organized process, as it happens in the case of risk culture.

4.4. Paper IV

Title: Unfolding Basel Internal Audit Practices in International Financial Institutions

Purpose - This paper explored the internal organizational variation of internal audit techniques applied to provide faith to risk management by Basel internal audit implementers, employing the concept of institutional complexity and agency.

Methodology - The empirical analysis relies on case studies of three Basel internal audit (Basel-IA) units of the three international financial institutions.

Findings – Findings of this paper suggest three approaches of internal organizational conditions that allow full or partial agency by filtering the availability of institutional logics to lower level actors carrying out the Basel internal audits. First, organizations could separate the logic by enacting different unit or structures for carrying different institutional logics and allow freedom to the carriers of logic in carrying out their work (Pache & Santos, 2010, 2013). Second, organizations could enact a centralized unit embedded within carriers of one dominant logic and provide freedom to instantiate the admixture of suitable hybrid logic by enabling partial agency of actors. Third, organizations could enact a virtual matrix structure to facilitate assimilation of multiple logic by providing freedom to the actors (Battilana, Leca, & Boxenbaum, 2009; Boxenbaum & Battilana, 2005).

Research Implication – Classical institutional theory only explains the coercive, mimetic and the normative forces that bring homogeneity into organizational responses and explains this by the decoupling of legitimacy and technical efficiency where legitimacy plays a more important role. There is significant debate on whether agency plays an important role or not within new institutional theorists. To bring into the idea of agency, the concept of institutional logic has been introduced. Institutional logics are culturally formulated, historically embedded practices, values, beliefs, assumptions, and guidelines by which actors decide to behave in a particular way or not (Thornton & Ocasio, 2008). Institutional logics explain varying responses of actors in institutionally complex environments. However, the explanation for the different responses from actors is a very contradictory space in the extant literature. Some studies explain the different responses by using full autonomy of actors (such as institutional entrepreneurs), others use a partial agency to explain differing responses (such as institutional embeddedness). This paper opens up this debate by focusing on conditions of the full or partial agency, i.e., when actors behave autonomously and when they do not.

Originality - The results of this paper highlights the arrangement of multiple external institutions such as regulation and professional standards and their mobilization in organizations by internal organizational conditions that allow embedded experts to exercise their full or partial agency by making one or multiple logics available to them. Consequently, the paper is among few emerging articles (cf. Martin *et al.* 2017) that explain the conditions of full or partial agency within institutional frameworks.

5. Contributions and Practical Implications

This thesis set out to explore control mechanisms instituted and implemented in the banking domain. In this regard, the thesis focused on two control functions risk management and internal audit. In doing so, the thesis utilized a theoretical bricolage to understand the institution and implementation of control functions in banks.

5.1. Theoretical Contribution

This thesis broadly contributes to two streams of research. Through the three exploratory field studies, the thesis posits two important contributions. First, the thesis highlights the changing notions of risk measurement and internal audit in the banking sector. In doing so, the thesis contributes to a few emerging qualitative field-based studies (Baud & Chiapello, 2016; Hall et al., 2015; Mikes, 2011; Wahlström, 2009) that study internal audit and risk management in the banking sector within their social and historical context. More specifically, the thesis (in Paper II) shows how non-convergence of operational risk practices forced regulators to change their activity and detail oriented advanced approach of risk measurement that (unintentionally) allowed the variation to flourish. In a similar vein, the thesis (in Paper III) demonstrates how the extension of internal audit to the non-tangible domain of risk culture raises doubts on the notion of “verification” and “control” attached to the practices of internal audit.

Second, the findings indicate the different participation approaches of various stakeholders in the transformation of the second and third line of defense. In doing so, the thesis contributes to understanding the techno-political institutionalization and implementation of internal audit and risk measurement practices in *the banking domain*. This contribution is important considering the diversity (cf. Bromiley *et al.* 2015, Baud and Chiapello 2016) and fluidity (Arena et al., 2010; Mikes, 2009, 2011) of internal audit and risk management practices in banks. Here, the thesis (in Paper I) demonstrates the separation and mixing of technical information and political rhetoric by the different stakeholders in instituting the liquidity risk standards. On the issue of internal audit of the Basel risk models (in Paper IV), the thesis demonstrates the filtering approaches of multiple institutional demands by the internal organizational conditions that enable full or partial agency of low-level internal auditors.

More specifically, in different papers, the thesis makes the following contributions to the literature. First, it extends the techno-political approach of studying institution of risk measurement in Paper I and II, by arguing for understanding embedding approaches of technical information along with political rhetoric during the shaping of risk measurement practices. Thus, instead of looking at

demarcation of technical and political (cf. Young 2014), or merely political (cf. Chee Chiu Kwok and Sharp 2005, Reuter and Messner 2015) or merely technical and instrumental approaches (cf. Königsgruber 2013); the thesis proposes to study both the demarcation as well as intermingling of political rhetoric and technical information. To bring the abovementioned contribution to the fore, the thesis also utilizes the “new rhetoric” approach that rhetoric could not be studied devoid of its information context. Furthermore, the study explicates the premise of Latour (1988, 1993) and Callon *et al.* (2009) that no facts, even *seemingly objective* measurements, are devoid of value by highlighting the coupling mechanisms of information and rhetoric.

Second, in Paper III, the thesis contributes to the understanding institution on the internal audit of risk culture. In doing so, Paper III highlights and links the varying broad goals of governance and control to the techniques of internal audit. In addition, the paper extends the view of Baud and Chiapello (2016) to understand variations in conceptions and integration approaches of control and empowerment in the extension of internal audit to non-tangible domains of risk culture. In doing so, the thesis raises concerns about the future of internal audit when extended to non-tangible domains of risk culture that go beyond all processes in organizations to the employees’ behavior and motivations. Furthermore, the thesis confirms the findings of Baud and Chiapello (2016) by finding the dominating presence of the rhetoric of control in the regulators’ and standard setters’ approaches. However, extending this to other stakeholders, the thesis concludes that normalizers such as the Institute of Internal Auditors and consultants promote the empowering of organizational employees by relying on self-examination as a prominent way to overcome deficiencies of the disciplining approaches of audit and governance.

Third, Paper IV explicates how internal audit approaches are influenced by internal organizations conditions that filter availability of institutional logics to lower level actors of Basel IA within organizations, allowing for freedom or curtailment of freedom in decision making by internal auditors. In doing so, this thesis develops the interaction of internal organizational conditions and external institutional constellations as the mechanism enabling or disabling the partial agency. Thus, the thesis explains the mechanisms of agency in neo-institutional approaches which have been a bone of contention in the field of institutional logic and are explored in a few recent papers (cf. Pache and Santos 2013, Busco *et al.* 2017, Martin *et al.* 2017)

5.2. Practical Implications

From a pragmatic perspective, the practitioners may utilize findings of this thesis in several ways to configure their control practices of internal audit and risk management. First, as shown in Paper I and II, critical thinking and better arrangement of contextual rhetoric and technical information during the

institution of internal audit and risk management practices could enhance the communication and information flow between different actors. For example, instead of tightly embedding the information with political rhetoric or ignoring the technical information, managers could provide transparent and clear information during the internal transformation of practices as well as during lobbying to gain favor from the employees or the authorities respectively. Since, lobbying as well as internal institution of internal audit and risk management practices within organizations are being questioned (Hayne & Free, 2014; Kaspersen & Johansen, 2016; Marti & Scherer, 2016; Roussy & Rodrigue, 2016; Sarens & De Beelde, 2006) and more and more transparency is demanded (Königsgruber, 2013; Richardson & Eberlein, 2011), organizations could learn from this thesis to become more information oriented during their dealings with employees as well as authorities.

Second, since internal audit is being extended to ambiguous and non-tangible concepts such as risk culture (Palermo et al., 2016) and ethics (Kaspersen & Johansen, 2016), understanding what is audited, how to audit or questioning the notion of audit using the framework of paper III could help build internal audit processes by explicating the critical data points and approaches to audit.

Third, organizations keen to shape and link risk management and internal audit with other organizational processes, in the wake of multi-vocal regulations and standards, could use the framework of Paper IV to decide on what level of freedom to provide to the teams engaging in such extensions. In this regard, organizations could utilize internal organizational arrangements to filter external institutional demands to allow for the type of agency they desire at the lower level employees and units. For example, organizations looking for traditional process control of non-complex processes could keep risk management, and internal audit teams separate whereas organizations with complex processes could enable their internal audit and risk management teams to make their own decisions in adapting their knowledge according to the need of different complex process.

6. Further Research

The results of this thesis open up several avenues for further research. First, the thesis (directly in Papers I and II, and indirectly in papers III and IV) challenges the rationale - purely technical and instrumental view of risk management and internal audit propounded in the functional and normative literature streams where scholars propound specific approaches to risk management and internal audit as effective or non-effective contingent on various conditions. In this regard, the findings of the thesis caution such technical studies to be careful and promote them to understand the shaping of risk management and internal audit in its organizational, social and institutional context. The thesis goes beyond simply challenging these notions and demonstrates how different actors play a central role in conceptualizing and utilizing the organizational, social and institutional complexities (Alvesson &

Robertson, 2016; McCabe, 2014) in their technical interpretation of risk management and internal audit. Many such approaches have become popular in organizational studies (but not in the field of accounting). For example, situated discourses (Jarzabkowski & Sillince, 2007), situational rhetoric (Georgiou, 2010; Weetman et al., 1996) and information context (Königsgruber, 2012, 2013) utilized by different actors are used in the extant literature to unravel the reasons for heterogeneity. Consequently, in further research opportunities, the thesis promotes inquirers to go beyond mere political qualifications to challenge the technical understanding by showing how actors draw linkages between the political and the technical as well as how actors demarcate technical and the political.

Second, in Paper III the thesis explicates the “balance” required between verification and control from internal audit on one side and empowerment of employees on the other sides (McCabe, 2014; Vaughan, 1999). The thesis goes on to question the established notion of verification attached to audit that has been promoted by the existing literature streams especially concerning audit applications to tangible process (Power, 1996, 1999). While verification makes sure that actors behave according to prescribed norms and helps curb not normative behavior that could be detrimental to organizations (Ferris & King, 1991; Morales, Gendron, & Guénin-Paracini, 2014). Verification fails to curb problems in organizations due to mechanistic thinking by employees and in fact promotes mechanistic thinking by employees by objectifying their behavior and robbing them of their subjectivities of the self (Kets de Vries, 1985; Linstead, Marechal, & Griffin, 2014; McCabe, 2014; Vaughan, 1999). Consequently, the thesis promotes further research in expanding the notion of the audit to make it better suited for organizations where employees feel empowered and not mechanized. This paper also encourages future studies on how could audit be extended to non-tangible domains such as risk culture or business ethics. Since non-tangible extensions of the audit are becoming important, and implementers are worried about how to carry out such extensions, the thesis promotes further studies in this area.

Third, in Paper IV, the thesis opens up debate on what level of freedom should be provided to control functions and how can their effectiveness, independence, and objectivity be ensured. As a result, the thesis promotes further research in understanding the mechanisms organizations could deploy to keep the effectiveness, independence, and objectivity of control functions considering the institutionally complex space control functions in the banking work in. The thesis also promotes further research on the tension between control functions and internal audits conception as governance of control functions.

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Paper I



Standard Setting in Risk Measurement: Framing an Accounting Device

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Abstract

The genesis of this study lies in the tension between the two dichotomous interpretations of standard setting. While the political interpretations explicate the political acceptance and legitimization, the instrumental interpretations study the technical usability. In contrast to these two dichotomous interpretations, we argue in favor of studying standard setting as a dynamic process comprising the interplay of political and instrumental. Consequently, based on the historical case of short-term-liquidity standard in Sweden, we focus on the development of the dynamics of political and instrumental during the three different phases of the framing of standards. Utilizing the concept of framing and overflowing we demonstrate how accounting devices are (re)framed by the differing interplay of political arguments and instrumental information, deployed by the proponents and opponents of new standards, in the three different phases of standard setting: isolation from practice, selection, and settling.

Keywords: Risk Measurement, Standard Setting, Lobbying, Framing, Overflowing

Introduction

Standards are “*not grounded in reason, and rarely in a consensus*” (Barry, 2002). In fact, accounting standard setting processes have to balance the instrumental use of standards (Murphy, O’Connell, & Ó hÓgartaigh, 2013; Pelger, 2016; Ravenscroft & Williams, 2009; Zeff, 2013) along with their political legitimization (Fogarty, 1992; Pelger & Spieß, 2017; Richardson & Eberlein, 2011). Instrumental usefulness ensures that the use of accounting standards results in trustworthy, comparable and useful information for stakeholders (Erb & Pelger, 2015; Samiolo, 2012; Young, 2006). On the other hand, political legitimization ensures that different stakeholders accept the accounting standards (Fogarty, Hussein, & Ketz, 1994; Lindahl, 1987; Richardson, 2008), suggest changes before being subjected to it, and use them in an appropriate manner (Bozanic, Dirsmith, & Huddart, 2012; Covalleski, Dirsmith, & Weiss, 2013; Fogarty et al., 1994).

However, instead of focusing on the balance between instrumental usefulness and political legitimization during standard-setting processes, the extant literature paints two contrasting and dichotomous pictures. First, there is an approach depicting standard setting as a political process, where the research focuses on understanding the political arguments of the involved stakeholders (Giner & Arce, 2012; Jupe, 2000; Reuter & Messner, 2015; Stenka & Taylor, 2010; Weetman, Davie, & Collins, 1996; Young, 1994) or power of standard setters in selecting viewpoints, either arguments or information, that suit their position (Chee Chiu Kwok & Sharp, 2005; Elmuttassim Hussein & Edward Ketz, 1991; Kwok & Sharp, 2005). The underlying assumption behind this approach is that standard-setting processes are about building consensus and legitimizing the standards among the stakeholders (Durocher, Fortin, & Cote, 2007; Lindahl, 1987). Research following the second approach describes the standard setting as an instrumental process, where the research focus has been on understanding the exchange of information among the involved stakeholders (Königsgruber, 2013). In this research, the underlying assumption is that standard-setting processes are about creating instrumental standards that are useful for the stakeholders (Königsgruber, 2012).

We argue that by focusing on only one side of the story, either political or instrumental, the scholars have ignored an essential idea that a fine balance between instrumental and political is not only crucial for the resulting standards but also during the process of standard setting. By not studying the interplay of instrumental and political during the standard setting processes, scholars are ignoring the dangers of the prevalence of either of these: instrumental or political. The dominance of instrumental content and

absence of political consensus could lead to the regulatory capture and eventually termination of the standard setters. E.g., the Cost Accounting Standards Board (CASB) in the USA was abolished because the CASB emphasized the instrumental regulation without taking into consideration the critical political concerns of the regulated and this prompted the regulated organizations to lobby massively to remove the CASB (Davis & Menon, 1987). On the other hand, the prevalence of political concerns could make regulations ineffective. The example of the failure of risk measurement standards that allowed a lot of flexibility and heterogeneity of practices due to political considerations resulted in several banking failures and financial crises (Barth, Caprio, & Levine, 2005; Wilson, Casu, Girardone, & Molyneux, 2010).

However, there is an acknowledgment of the interplay of instrumental and political in some emerging research articles, but such interplays are seldom developed in detail (Hoffmann & Zülch, 2014; Morley, 2016; Reuter & Messner, 2015; Zeff, 2015). Some emerging accounting studies depict the interplay of political arguments and instrumental information non-saliently by undermining the instrumental in favor of the political. For example, Hoffmann and Zülch (2014) described how mythical arguments are used by the lobbyists to posit their preferred view-points as instrumental information to non-expert parliamentarians. Morley (2016) shows how instrumental and political helps dominant internal groups of standard setters in the polarization of views within standard-setting bodies, as well as among the lobbyists. While these emerging studies confirm the interplay of political and instrumental, there is a lack of understanding on how this interplay evolves during the standard-setting process.

Moreover, many such interplays leave the instrumental to the matter of political adjudications. This is played in two ways. First, the political persuasions are theorized to supersede the relevant instrumental information in decision making by the standard setters (Morley, 2016). Second, in cases highlighting the expertise gap between standard setters and interested parties or lack of resources in standard setting bodies, argumentative genre as the medium of exchange of instrumental information has been shown to help parties to pass on biased information mixed with their political interests as “truthful” information (cf. Hoffmann and Zülch 2014). Keeping these limitations in mind, and building on the contrast between standard setting as a political process and standard setting as an instrumental process, in this paper we seek to examine how the interplay of political and instrumental evolves during the standard-setting processes.

Apart from the theoretical motivation mentioned above, the empirical motivation for this paper stems from a lack of focus on standard setting other than financial accounting standards in the extant literature (Cooper & Robson, 2006; Reuter & Messner, 2015). While financial accounting standards are ubiquitous and mandatory (Pelger, 2016), there are many emerging standards in accounting (such as voluntary sustainability standards and compulsory risk measurement standards), which can inform the standard-setting literature in accounting due to their contextual similarities and dissimilarities (Reuter & Messner, 2015; Wahlström, 2009). There are some similarities between risk management standards and accounting standards, such as the focus on prospective calculations and distributed nature of instrumentally useful information among different stakeholders (Baud & Chiapello, 2016; Erb & Pelger, 2015). Moreover, both accounting and risk measurement standards are supposed to make reporting comparable, while avoiding direct intervention in an organizations' ability to create value for its stakeholders (Laeven & Levine, 2009; Young, 2003). Also, both the standards are equally detailed regarding calculative principles and provide a certain degree of self-regulation (Baud & Chiapello, 2016; Königsgruber, 2013).

There are some differences between these standards too. In comparison to accounting standards, banking risk standards are more reactive (Marti & Scherer, 2016; McGoun, 1995; Millo & MacKenzie, 2009), more volatile (Huber & Scheytt, 2013; Turner, 2009), and are applied to existing practices that are more heterogeneous and ambiguous (de Goede, 2004; Mikes, 2009; Wahlström, 2006). The heterogeneous nature of risk measurement practices on the one hand and the reactive and volatile regulations on the other create a contentious ground that could facilitate the study of the interplay of instrumental and political to inform the accounting standard setting literature. Consequently, we utilize the case of the short-term liquidity measurement, Liquidity Coverage Ratio (LCR), in the Swedish banking system, to inquire on the interplay of instrumental and political utilized by the stakeholders during the standard-setting processes. Thus, this study is in line with Cooper and Robson (2006) promoting the idea of studying "multiple sites of accounting regulation and professionalization" to enrichen the accounting standard setting literature.

Our findings suggest that there are ***two approaches of the interplay of instrumental and political*** utilized by the stakeholders. Both of these interplay mechanisms attribute different roles to information and arguments. First, loose-coupling where information is presented separately from the political arguments. In this approach, arguments merely serve the purpose of legitimizing actors' viewpoints, and the information is presented decoupled from arguments, as much as possible in a dull and prosaic manner to

dissuade displacement by other actors. Second, tight coupling where politicized (sometimes unauthentic) and biased information is tightly coupled with the political arguments. This approach utilizes arguments as a vehicle to pass politicized and biased information that allows actors to counter viewpoints of other actors. We also found evidence of a third approach of selective-coupling where information is coupled tightly with the political arguments. However, in the case of selective-coupling, the stakeholders presented information either on their area of expertise or where other stakeholders explicitly sought information. Consequently, in the selective-coupling based approach, political arguments become a vehicle to bring credibility to the stakeholders' information.

Also, our analysis indicates that the different stakeholders used the three *interplay approaches of information and arguments at different phases* of the short-term liquidity risk measurement approaches. E.g., the standards setters used the loose-coupling approach throughout different stages of development of measurement approaches. However, the banks and the lobbyists used this approach in the mature stage when tight coupling approach utilized in initial stages failed to get the support of the standard setters.

Discussion of the interplay of information and arguments contribute to the literature on standard setting in accounting in two distinct ways. First, this study takes Hoffman and Zulch's (2014) approach of arguments as a vehicle for information exchange and extends it further by showing how different combinations of information and arguments not only serve exchange vehicles for each other but also are linked to different legitimization and credibility approaches. Second, we present a historical understanding of the development of accounting devices where accounting devices are shown to engender as well as restrict controversies.

The rest of the paper is organized as follows. The second section discusses the theoretical background and outlines the conceptual framework of the study. After that, the third section deals with the methodology. The fourth section presents the case and the results of the analysis. The fifth section discusses the identified approaches of the interplay of instrumental information and political rhetoric deployed by the stakeholders. Finally, the paper concludes with theoretical and practical implications as well as future research opportunities.

Theory: Arguments and Information in Standard Setting

Theoretically, accounting standard setting has been studied both as a political exercise as well as an instrumental exercise. Both the instrumental as well as the political standard setting literature streams of accounting draw on the rational choice model of Sutton and positive theory of Watts and Zimmerman. In these models, political involvement of the stakeholders is pinned to the logical behavior of the actors (Sutton 1984; watts and Zimmerman 1978). Taken together, these studies proclaim that the lobbyists decide to politically influence the decision if they perceive the economic benefit of the lobbying to be higher than the cost incurred in lobbying (cost of information acquisition as well as a direct contribution to politicians). While the inclusion of a term such as “perception” of cost and benefit ascertains the bounded rationality of the players, these theories fail to include any irrational lobbying behavior.

Arguments in Standard Setting

Since political aspects such as consensus, legitimacy, and transparency are becoming a norm in establishing standards, it would be unwise to ignore political and irrational aspects of standard setting. Moreover, in recent years there has been an explosion of accounting standard setting studies focusing on political negotiations and legitimizations. To ascertain the political aspects of legitimization and consensus, scholars have studied arguments of the involved parties. In such studies, there is a lot of focus on the nature of the arguments, as well as the relative influence of such argumentations (Weetman, 2000). Based on nature of arguments and relative influence of arguments, we categorize literature the standard setting literature of accounting into three categories. The first category considers the nature of arguments deployed by the lobbyists. The second category looks at arguments deployed by the standard setters, and the third category looks into what type of arguments from the lobbyists are effective into gaining favor by the standard setters.

The literature on the analysis of arguments of the lobbyists is mostly restricted to the “for” or “against” rhetoric propounded by them (watts and Zimmerman, 1978; Puro, 1984; Francis, 1987; Mian and Smith 1990 – Weetman, 2000). Most of the “for” arguments by the lobbyists relies on ---Most of the “against” arguments by the lobbyists poses questions on relevance to users, incompatibility with the regulated organizations existing business and appropriateness of calculative principles to the applied case. For example, Laux and Leuz (2009) show that banks opposed the fair value accounting by arguing that such accounting methods are *not relevant for investors, does not suit the business model of most banks, and is*

not appropriate for illiquid assets or assets that are held to maturity. Jeppeson (2010) posits that some arguments become more or less effective because of existing current perceptions. For example, if globalization is considered a positive, then local consequences become less effective in political debates. Moreover, in this regard, scholars also mostly rely on the two broad categories of Tutlici et al. (1994) who analyzed the strategic choice of arguments by the lobbyists categorizing the arguments in two categories: economic consequences or conceptual. Jeppeson (2010) and Jupe (2000) show how lobbyists enroll standard setters by self-referential arguments to accept their positions.

The literature on argumentative devices employed by the standard setters focuses on the “serious text” of standards as well as the “preambles” (Masocha and Weetman 2005). Young (2003, 2014) argues that standard setters use three types of rhetoric: one that posits their standards as good, second that silences their criticism and third that constructs the standard setter as a good standard setter. The good of new regulation is posited by citing the instrumental refinement of the regulations. For example, Young (1994) argues that the Financial Accounting Standards Board used arguments such as *“refine and “improve” the financial reports of the organization* to put forth new standards. Young (2006) as well as Sylvain Durocher and Gendron (2011) shows how users of financial information are constructed through arguments by the standard setters to put their point in the positive light. Furthermore, Young (2003) argues that texts of output standards also reflect a specific point of view - “express a particular point of view about the significance of events and activities that occurred during the standard-setting process.”

The literature on the treatment of arguments by the standard setters shows that the type of arguments, such as principle-based, logical as well as economic consequences to be more accepted by the standard setters (Weetman, 2000). Many scholars have proclaimed that economic consequence-based arguments are less effective in changing standard setters’ position and are mostly applied to change the certain principle of the standards by the lobbyists. The arguments relating to the conceptual usefulness of the standards had been shown to be more influential on the standard setters in changing their instance (Kwok and sharp 2005). Among logical and conceptual arguments, Weetman (2000) indicates that arguments based on complexity, difficulty in preparing reports and confusion were more effective in conveying the message to the standard setters where standard setters responded to such signals. Weetman (2000) also indicates that sometimes the volume of opposition, instead of the nature of argument proves effective. Sanction and boycotting of the standards where parties threatened to boycott the standards were found to be not influential on standard setters. Such arguments were also few and far between. Some specific

groups also received better treatment by the standard setters. E.g., users and Preparers were given preference by the standard setters (Durocher et al., 2007; McLeay, Ordelheide, & Young, 2005) (Kwok and Sharp, 2000).

Overall, this stream of literature tends to attribute a lot of importance to arguments and political considerations of the standard setting. Such depictions bank on the idea that standard setting is moving from what is appropriate to what is acceptable (Fogarty, 1994; Lindahl, 1987) and as a consequence the instrumental standards promulgated by standard-setters (Hazgui and Gendron, 2015; Young, 2003, 2014), cannot be established without politically aligning other stakeholders through private/public consultations (Botzem and Quack, 2009; Deakin, 1989; Fogarty, 1992). However, such depiction forgets to take into consideration that standard setting is becoming more transparent with the application of due processes, and thus transparent decision making would require logical decision based on the information.

Information in Standard Setting

While political aspects such as consensus and legitimization do characterize standard setting, some recent studies in accounting, inform us of the importance of information exchange during standard-setting processes (Botzem 2014, Koningsgruber 2013). In contrast to the political studies of standard setting that focus on consensus and legitimization, the instrumental stream of the standard setting literature presumes that standard setting is an instrumental exercise where information plays a very important role in ascertaining the quality of the technical output, i.e., regulation. Especially in the field of accounting, Information becomes important since there is no uncontroversial theory to make accounting based standards (Koningsgruber 2013). Such reasoning could be easily transferred to the field of risk measurement as well, where theories on risk measurement are shown to be quite controversial. Also, lack of expertise (Hoffman Zulch) or resources (Koningsgruber 2013; Chalmers, Godfrey and Lynch 2012) to understand the impact of new or changed standards, also prompts for informational input from the involved parties. The main idea here is that standard setters lack knowledge of the local and global ground conditions of the industry and desire more information to understand such situations before recommending standards. Such situations can also be extrapolated to risk measurement because; the BCBS and other standard setters sometimes lack resources, expertise, and knowledge.

This stream specifically explicates the type of information exchanged between the stakeholders. Scholars point to three types of information passed to the standard setters by the lobbyists. First, the expert

knowledge that helps standard setters in the understanding of the current practices in a particular area. Second, the general interest information of the domestic area stakeholders. Third, the general interest information of the specific parties.

Similarly, scholars point to three types of information passed by the standard setters to the lobbyists. First, the principles and rules. Second, the reasoning and instrumental details behind the proposed rules and principles. Third, the information on acceptance or rejection of a particular interest groups viewpoints.

The studies on Information exchange in the standard setting literature are also not devoid of political concerns. However, this focus on political concerns is attributed to the important role attributed to the rational choice model of Sutton by the scholars. Following Sutton's model, these studies link instrumental information provision, withdrawal or selection to the rational cost-benefit considerations (Königsgruber, 2013). The main theme is that information is distributed, and actors need to incur expenses to collect information. Hence, actors are shown to collect information if they perceive the benefit of lobbying to outweigh those costs. Moreover, actors are shown not to share unfavorable information and substitute it with biased information to gain favor from the standard setters. Another drawback of this literature stream is predominance of economic model driven studies that address questions of why verifiable instrumental information is withheld or provided by the various stakeholders in political discussions (Königsgruber, 2012, 2013); or what kind of verifiable information standard setters seek from the lobbyists' (Bennedsen & Feldmann, 2006; Bouwen, 2002, 2004; Dahm & Porteiro, 2008), and ignore how instrumental information is shared and exchanged by the stakeholders.

Problematization and Framework: Interplay of information and arguments

As highlighted in the two sections above, there is an enormous amount of research on standard setting from either political or instrumental points of view. We argue that by focusing on only one side of the story, either political or instrumental, the scholars have ignored an important idea that understanding both instrumental and political are important for the process of standard setting. By not studying the interplay of instrumental and political during the standard setting processes, scholars are ignoring the dangers of the prevalence of either of these: instrumental or political. The dominance of instrumental

content and absence of political consensus could lead to the regulatory capture and eventually non-existence of the standard setters. E.g., the Cost Accounting Standards Board (CASB) in the USA was abolished because the CASB put an instrumental regulation without taking into consideration the political concerns of the regulated and this prompted the regulated organizations to lobby heavily to abolish the CASB (Davis & Menon, 1987). On the other hand, the prevalence of political could make regulations ineffective. The example of the failure of risk measurement standards that allowed a lot of flexibility and heterogeneity of practices due to political considerations of neo-liberalism resulted in several banking failures and financial crises (Barth et al., 2005; Wilson et al., 2010).

We do find that there is an acknowledgment of the interplay of instrumental and political in many existing research articles, but such interplays are seldom developed in detail (Hoffmann & Zülch, 2014; Morley, 2016; Reuter & Messner, 2015; Zeff, 2015). Some emerging studies (cf. Erb and Pelger 2015; Hoffmann and Zülch 2014; Morley 2016; Zeff 2015) have started to focus on the importance of instrumental information and political arguments both. For instance, Hoffmann and Zülch (2014) demonstrate that mythical arguments are employed as a vehicle to transfer policy-relevant biased information to the non-expert stakeholders. They further demonstrate that the conceptual and economic consequence-based arguments are employed to transfer information on policy-relevant concepts or information on the consequences of policy decisions respectively. Young (2003) shows that standard setters use rhetoric or metaphor to convey the information an appealing manner to the regulated. Young (2014) shows that standard setters and other stakeholder transmit information on their positions by indulging in argumentations that focus on reinforcing objectivity of their opinion and highlighting non-objectivity of opposite viewpoints. Morley (2016) shows how standard setters seek information to resolve internal feuds between standard-setting actors with different opinions by using information and arguments to monopolize opinions.

While emerging studies point to an interplay of political and instrumental, these studies subjugate the instrumental information to the matter of political adjudications in two ways. First, the political persuasion and linguistic skills are theorized and demonstrated to supersede relevant instrumental information in decision making by the standard setters (Morley, 2016). Second, arguments are depicted to be the media of exchange of information side-lining roles information may play in qualifying arguments (cf. Hoffmann and Zülch 2014). The side-lining of roles played by information is not commensurate with both the political science as well as language and communication-based literature streams. We know from

the broader political science literature that, political arguments and politics, in general, would become futile in the absence of instrumental knowledge and information (Barry, 2002; Walgrave & Dejaeghere, 2017). Basing it on the terminology of Jeremy Waldron, Barry (2002) sums it up saying “*there is a physics to politics.*” Moreover, we know from the language and communication based literature that a political rhetoric is situated within a technical context, where information on technical context helps in determining the meaning of the overall message (Bitzer, 1968; Heracleous, 2006; Heracleous & Barrett, 2001; Heracleous & Marshak, 2004; Smets, Jarzabkowski, Burke, & Spee, 2015; Vatz, 1973).

Making of an accounting device

How can we understand the interplay of arguments and information during the accounting standard setting processes? A pragmatic approach would be to consider the accounting standard, in our case the calculation of short-term liquidity risk measurement, as the device framed and reframed by the interplay of technical and political. Accounting devices (Callon, 1991), such as the calculation of short-term liquidity risk measurement, are explicitly mentioned as being framed and reframed in the actor world by Callon. These calculations contain knowledge claims of existing practices (Latour, 1987) that are utilized by actors in their endeavors frame and reframe them and in their efforts to enroll other actors into accepting these framed or reframed calculations as pure. When a frame is more or less uncontested and uncontroversial, it is considered to be pure.

However, several scholars argue that framing is always an exception and frames are always overflowing. This overflowing could be connected to the way accounting devices enable calculation of things or materials. The accounting devices, indeed, “act or make others act” by enabling calculation. The mechanisms through which devices enable calculation can be summed up as detaching or abstracting. This detaching, or abstracting helps simplify the complex actor worlds and in doing so renders calculations possible by limiting the considerations of no of actors and their relationships to the protagonists. The important point here is that the defined calculating devices merely constitute socio-technical isolation in the eyes of its protagonists, in reality, the socio-technical devices of calculations do exist connected to the broader sociotechnical world and hence framing is always incomplete and susceptible to overflowing.

The most important concept highlighted above is that of framing and overflowing. We utilize these concepts to demonstrate framing and reframing of accounting device (short-term liquidity risk measurement) in an actor world where different actors possess different intentions. The framing of

accounting devices happens in such a manner that they isolate different actors and their interrelations necessary for the specific calculation. However, since frames are always connected to the broader socio-technical networks, it is always possible to highlight the relevant socio-technical ties to reframe the overflowing frames.

Several scholars have utilized the idea of accounting devices, such as Moor's law and accounting calculations, as framing devices in themselves linking it to Callon's famous article on economics as theory and economy as a thing (Jeacle & Carter, 2012; Jordan, Jørgensen, & Mitterhofer, 2013; Miller & O'Leary, 2007). While doing so, scholars have transposed the idea of accounting devices as representations framing practices by working as mediators between different domains and actors. By working as mediators, these devices are shown to pacify controversies through common representation as well as enable intervention in practices. For example, Miller and O'Leary (2007) show how Moor's law mediated between domains of economics and technology in the semiconductor industry. The law allowed companies to intervene in their capital budgeting decisions and made market representation similar across the industry. Kurunmäki and Miller (2011) showed how management control practices mediated between legal and policy domains. Management accounting practices allowed actors to intervene through formal cooperation and represent "seamless" service delivery across organization and professionals. Jeacle and Carter (2012) demonstrate how accounting mediated between the creative concerns of designers, and cost concerns of buyers and merchandiser in the fashion industry. Accounting helped in representing performance concerns of the trinity of designer, buyer, and merchandisers to each other and allowed intervention to facilitate a balance between creativity as well as cost concerns. Christner and Strömsten (2015) show how different measurements such as market share and internal rate of return mediated between economic and scientific considerations during different phases of a biotech company by allowing common goal representation understandable to the actors of both science and economic domain. The different accounting measures also allowed a different type of interventions to actors during different phases of the company. Jordan et al. (2013) show how risk maps as mediating instruments allowed a variety of actors to adjudicate interests, build confidence in and associate with 'the project' and its progress over time.

We argue that several scholars have used this concept of accounting devices as mediators since it fits well with the idea of Hacking (1992) and Wise (1988) on which scholar's do draw on as well. Wise (1988) used the idea to show two modes of mediation: conceptual mediation and methodological mediation. Wise

(1988) demonstrated steam engine as a conceptual mediator between “value” concept of political economy and “work” concept of engineering. Furthermore, Wise (1988) used the electric telegraph to demonstrate methodological mediation between industry and scientific theory of electromagnetics. The mediating instrument analogy was later popularized by Hacking (1992) to show that scientists were obsessed with theory and representation rather than instruments and intervention. While transporting this idea, the extant accounting literature also demonstrated two ways accounting worked as mediating instruments, as a means of representation as well as an intervention (Jeacle & Carter, 2012; Miller & O’Leary, 2007). These practice-centered ideas building on representation and practice also conform to what Foucault referred to as programs and technologies. In Foucauldian denominations, programs represent the concept and technologies represent the day-to-day practice (Dean, 1999; Foucault, 1988; Rose, 2004).

We argue that by applying the concept of accounting devices as mediating instruments, scholars have downplayed the spirit of political and technical that inspired Callon to explicate the performativity of economic calculating devices in shaping the economic markets (Barry, 2002; Callon, 1998a). If we utilize Callon and Latour’s paradigm, then both economics and economic markets are actor worlds, i.e., a mixture of both political as well as technical (Callon, 1998a; Latour, 1988). Consequently, in this paper instead of focusing on dichotomous paradigms of representation and practice to explicate mediation mechanisms, we focus on the historical framing and reframing of accounting devices in the socio-technical actor worlds. Moreover, like previous studies (Jordan et al., 2013; Latour, 1988; Young, 2014), we deploy arguments to study the political and information on devices and techniques to study the instrumental. While using the term instrumental, we understand that the devices and techniques and information on them may not be purely technical (Latour, 1993, 2005). This ties back to the idea of ANT that separation between technical and political is not easy to draw.

Furthermore, we also argue that the extant literature has paid scant attention to how accounting devices are framed and have focused instead more on how accounting devices as frames isolate and purify cross-domain calculability. To study framing of accounting devices, we utilize Callon’s argument that “devices are a result of certain history and context.” Furthermore, the next question arises as to how can we study this history and context that contains framing and reframing of accounting devices? In this regard, we take the interpretative view of history and focus on one aspect of history to highlight framing and reframing of devices. Thus, our intention in this study is to show how actors indulge in framing and

overflowing by enrolling the actors through a specific trope of argument, instrumental information and their interplays. We argue that this perspective of how accounting devices emerge in the actor worlds through framing and overflowing by linking framing and overflowing to tropes of arguments, instrumental information, and their interplays could reveal mechanisms actor utilize to stabilize and destabilize the calculating frames. Since purified and stabilized accounting devices emerge when controversies are settled temporarily, a historical view also lets us explore the different phases of the emergence of accounting calculations and their link with surrounding controversies.

By using the concept of framing and overflowing to inform our analysis of the adaptation of the Liquidity Coverage Ratio in the Swedish context, we bring two important considerations to the fore. Firstly, the concept of framing helps us unravel how the interplay of information and arguments of different actors frames specific measurement approaches by delimiting controversies and by isolating common representations. Specifically, we look at how different actors try to mobilize their political and technical concerns and with what type of arguments and information. Secondly, we utilize the concept of overflowing to draw attention to how the measurements are modified by the actors to suit their interests. Specifically, we are interested in the changes of the measurement and how these changes in measurements are facilitated by the different political and technical concerns of different actors on the already established approaches of measurement. This is made possible by tracing the historical evolution of measurement applied in this study. Thus, in this way, we use the criticism of Callon from Daniel Miller and Barry where they argue that calculating devices become a conduit to reframing instead of becoming an instrument of isolation. Also, in contrast to the previous studies of accounting measurements as framing devices, we also show how the political and technical considerations frame the measurements during their mediation of different domains and actors.

Methodology & Analysis

Given that, empirically the standard setting of the short-term liquidity risk measurement in banking is a novel phenomenon representing reversal of two decades of self-regulation by promotion of stringent measurement approach, and little is known theoretically about the proposed research inquiry on how interplay of information and arguments shape standards, this paper selected an inductive case study approach. This is in line with the views of Edmondson and Mcmanus (2007) that inductive theory development should focus on the novel phenomenon to develop theoretically novel insights. The justification for an inductive study also rests on the fact that such methodologies have been used in

accounting on a number of similar standard-setting studies that tend to focus on new novel standards (e.g., Reuter and Messner 2015), theoretically unexplored territory (e.g., Hoffmann and Zülch 2014; Young 2014), “how” type research questions (cf. Fogarty 1992; Weetman et al. 1996) or mobilize multiple observations on complex standard-setting processes (cf. Giner and Arce 2012).

Selection of Cases & Empirical Setting

The study relied primarily on the data from the Swedish banking sector. There were several reasons for this selection. First, owing to its limitations in size, Swedish banking sector is concentrated, and is dominated by a small number of large banking organizations (Riksbanken, 2013), which made it easy to identify and interview different actors. Second, Sweden is prominently ranked on the transparent government and e-governance initiatives in the world (United Nations, 2015), which helped in getting access to the public documents.

More specifically, the study revolved around the enactment of a short-term measure of liquidity: the “Liquidity Coverage Ratio (LCR).” This measure was introduced in 2009 and was, during the study, still under the process of refinement. Drawing on the LCR case provided a unique setup where several factors contributed to a highly contested environment suitable to study embedding of argument and information by different actors. First, LCR introduction reduced the scope for self-regulation of short-term liquidity risk measurement and imposed a more concrete measurement approach since short-term liquidity became a prime concern in the aftermath of the financial crisis. This change of approach instigated banks to fight for avoiding changes due to the newly introduced standards. Second, despite relatively better performance compared to their European counterparts after the financial crisis of 2007, the Swedish banks were forced to debate on a stricter approach by their local regulator, in comparison with the instructions of the European Banking Authority (Goddard, Molyneux, & Wilson, 2009). The central bank (Sveriges Riksbank) and the financial supervisory authorities (Finansinspektionen - FSA) pushed for tighter deadlines and stricter standards than most other European nations did. Third, since standard setters had knowingly taken a strong instance towards a shift that was bound not only to entail economic consequences regarding installing new calculative processes but also regarding deep-rooted changes in the business of risk taking for the regulated banks, short-term liquidity risk measurement became a contentious ground.

In the banking domain, risk measurement practices are guided by multi-layered standards (Bhattacharya & Thakor, 1993; McGoun, 1995; Schooner & Taylor, 2010). For example, Swedish banks are influenced by the Basel standards, European Union laws, and directives, as well as the national standards and regulations (Bouwen, 2004). Henceforth, this unique multi-actor setting also offered a useful ground for analyzing the arguments and information exchange between different stakeholders with diverse interests and intentions (e.g., tighter regulation by standard setters, fair treatment by implementers, business opportunities by consultants).

Data Gathering

The study intentionally followed the actors (human and non-human entities), to bring the relevant story to the forefront. Consequently, the study relied on two primary sources of information: studies of communication documents (see Table 2) and interviews with 19 key actors in the Swedish banking system (see Table 1).

The interviewees represented key actors dealing with the Basel liquidity measurement regulatory implementation in the Swedish banking system: e.g., banks (a major bank, a major corporate bank, and a major export credit provider to small and medium enterprises), banking associations (a buy-side analysts' association, and a banks' association), the consultants (a major risk management software consulting firm, a major risk management process consulting firm, and a major risk-related accounting consulting firm), and regulators and standard setters (the Basel Committee, the European Banking Authority (EBA), FSA-Sweden). As shown in previous studies, these types of organizations influence standard setting processes more than other actors (Bouwen, 2004; Giner & Arce, 2012; Reuter & Messner, 2015; Tutticci, Dunstan, & Holmes, 1994).

The interviews started with the internal audit department of one of the major Swedish banks, where interviewees were explicitly asked to refer to other relevant key actors in the network with whom they worked (Callon, 1998b). This network identification was also supplemented by a document analysis and website search of the major regulators - the FSA, the EBA and the Basel Committee, to identify the actors sending comment letters or responses to the regulators' call for a consultation.

INSERT TABLE 1 ABOUT HERE

The interviews were conducted to understand different key actors, their expertise, activities, and collaborative interests. The interviews were conducted between March 2013 and November 2015. The interviews were semi-structured and took 1-2 hours each. In all the cases, confidentiality of the informants was maintained. All the interviews were recorded where permissions were granted. This meant that out of 19 interviews, 16 were recorded. At two interviews, manual notes were taken, and one interview was carried out through e-mail exchanges, for practical reasons.

Apart from the general understanding of the actor's roles and responsibilities and their organization's general structure and functioning, the interviews were predominantly focused on understanding three important aspects during the enactment of LCR. The first aspect focused on the informant's and their organization's interest in the liquidity risk measurement. The question's specifically addressed the motivation for change or inertia towards change as well as on how the change or status quo will affect organization's business and other interests. The second aspect addressed how do informant's organizations operate and participate in this measurement that shape liquidity risk measurement. This concern was addressed by asking questions about internal organizational structure, the responsibility of members, and processes of production of inscriptions of communication documents aimed at promoting organization's specific interest concerning liquidity risk measurement.

Furthermore, informants were asked about their network and alliances that they formed with other actors. The third aspect focused on informant's and their organization's most important concerns on the proposed measurement and how did they push for it during negotiations. Here, the questions focused on understanding technical content as well as political alliances that actor's formed regarding their specific concerns.

Informant biases were addressed in several ways. First, information received from the interviewees were triangulated through other available public documents for factual validity (Norris, 1997). Second, the anonymity assurance to the interviewees helped us in getting open responses (Miles & Huberman, 1984). Third, the interviews addressed recent activities, which were still going on, which enabled reduction of retrospective recall bias (Miles & Huberman, 1984). Fourth, the risk of cognitive biases and impression management was reduced by asking informants to reflect on concrete events rather than abstract concepts.

Communication documents for the period 2009-2016 were collected from the websites of the interested organizations and regulators. The year 2009 was selected because the Basel Committee introduced the concept of LCR that year. Even though such documents primarily represent only the "public" aspect of lobbying, their availability has been considered an important source of information in previous research (Weetman et al., 1996). In the search for relevant documents, websites' advanced search mechanisms, interviews, as well as secondary source readings were used.

INSERT TABLE 2 ABOUT HERE

Data Analysis

The inductive case study approach enabled the authors in generating rich and useful field-based insights into the actions of key actors as well as their approaches to embedding information and arguments (Yin 2008). This rich collected data were analyzed in several steps. For the first step of the analysis, extracts and sections relevant to LCR were selected from the archival documents as well as the interviews and notes. Then the selected sections and extracts were organized chronologically. The result of this step of analysis was the historical background and the case storyline. Thus, this stage set the background of the study, demarcating significant events, key actors and what appeared to be the pivotal turning points in the history of LCR. These case contexts and histories were validated by going back into the data and discussions among the co-authors.

The second step of the analysis focused on identifying the type of information and arguments used by the actors. Here the study relied on the previous categorization of information types as well as arguments as discussed in the theoretical framework section. In the third step of the analysis, the mapping between the type of information and the type of arguments was carried out. This mapping revealed patterns of embedding followed by different actors.

Case Study

Different actors and their intentions:

In this section, we explore the different actor groups, their *modus operandi*, their roles and their intentions in framing the short-term liquidity risk measurement standards in the Swedish context (See fig. 1.a & 1.b).

Proponents of Change

Regulators and Standard Setters:

Swedish banking sector is regulated under a multi-layer system of regulation and standards. On the international level the Basel Committee on Banking Supervision (BCBS), on the European Union level the European Banking Authority (EBA) and on the Swedish level the Finansinspektionen or the Sweden's financial supervisory authority (FSA) take the lead in establishing the standards and regulations that guide the banks and their behaviour (See fig 1.a). In this subsection, we detail on the intentions of these different actors and roles played by them in establishing the liquidity standards for the Swedish banks.

The most important player on the international level is the BCBS. The BCBS was established in 1974 in the aftermath of the international currency and banking crisis and was initially named as the Committee of Banking Regulations and Supervisory Practices. The committee first issued its concordat in 1975. The other most notable of its international banking standards are the Basel I (initiated: December 1987, finalized July 1988), the Basel II (initiated: June 1999, finalized June 2004) and the Basel III (initiated: July 2009, finalization ongoing) accords. As informed by the BCBS informant (interviewee 14), publications of the BCBS are *“not legally binding. However, the members of the BCBS have signed up to a charter that stipulates its members to commit to implementing the standards issued by the BCBS.”* It is important to note here that the member countries are bound to implement the standards. Other than the standard, the BCBS also issues non-mandatory guidelines that elaborate on standards and non-mandatory sound practice documents elaborating on practices of the banking sector. The main intention of the BCBS is to assume the center stage in information sharing among regulators, practitioners, banks, and the public at large on the issue of international banking standards and guidelines.

After the BCBS, the most important player for banks in the European Union (EU) is the EBA. The EBA was established on 1 January 2011 and replaced the Committee of European Banking Supervisors (CEBS) that was formed in 2004. The EBA and its predecessor CEBS had representation from the supervisory authorities and central banks of the EU. While the EBA issues mandatory regulations and directives, the CEBS only had advisory role and power among member states. The most important objectives of the EBA are to produce and administer a *“single set of harmonized prudential rules for financial institutions throughout the European Union”* and to *“improve the functioning of the internal market by ensuring appropriate, efficient and harmonized European regulation.”* The EBA categorizes documents into two broad categories. The first category comprises final documents relating to technical standards, guidelines, and recommendations. The second category comprises work-in-progress documents related to opinions, reports and other publications. The main intention of the EBA is to assume the center stage in information

sharing among regulators, practitioners, banks, and the public at large on the issue of European banking standards and guidelines. Furthermore to EBA and CEBS, the European Commission (EC), the European Parliament (EP) and their various committees are also directly involved in enacting regulations and directives as legally binding laws within the EU.

Within the jurisdiction of Sweden, the Swedish FSA assumes a central role. The FSA was established in 1991 *with the aim of creating a single integrated regulator covering banking, securities, and insurance*. According to our research, the Swedish FSA categorizes its documents in mainly two categories: regulation, and others. Other documents are further classified related to supervision, authorization and other news and report items. Apart from the FSA, the Swedish central bank, the finance ministry, finance department and the Swedish parliament are also involved in enacting regulations and directives as legally binding laws within the Swedish jurisdiction. The FSA aims to assume the center stage in information sharing among government authorities, practitioners, banks, and the public at large on the issue of Swedish banking standards and guidelines.

To fulfill their respective aims of enacting regulations, directives, and standards, all the authorities mentioned above follow due processes of public consultation. These due processes ensure early conflict mitigation, information sharing, acceptance of the standards by the regulated and their legitimization in the eyes of all the stakeholders. In the due processes of the regulatory and standard-setting bodies mentioned above, the case of the BCBS is peculiar in that the BCBS is not a public authority, and hence publication of responses from the respondents and reasons for acceptance or rejection of their suggestions is not always published and depends on the discretion of the BCBS (Interviewee 14).

On the issue of the short-term liquidity, analysis of our documents and interviews reveal that the different standard setters and regulators had different intentions on the banking standards and regulations concerning the short-term liquidity risk measurement (see fig 1.b). The BCBS strived to achieve international rules that were flexible enough for the supervisors and yet provided sufficient homogenization of international standards. The EBA wanted harmonization of the new liquidity standards within the EU. The Swedish FSA wanted Sweden to be among the early adopter of the new rules and standards on the short-term liquidity measurement. This early adaptation was in line with the FSA's decision to impose more stringent and early implementation of the standard in the Basel II era.

Insert Figure 1.a

Opponents of Change

The Banks and the Lobbyists

Swedish Banking sector is a highly concentrated banking system where four major banks cover 80% of the assets. Apart from these four major banks, there are roughly 2000 smaller banks with specialized services and niche customer base. As several informants (Interviewee 1,2,3,4 and 5) suggested - in terms of lobbying, the smaller banks were relying on the local Swedish lobbying organizations since it was less costly and more convenient to participate, whereas the large banks participated in several lobbying organizations. The informants (interviewee 1, 2, 3, 4, 5) also suggested that apart from lobbying on the relevant Swedish issues on behalf of its members, the Swedish lobbying organizations also worked as a source of information and discussion center for the smaller banks on new regulatory issues. Furthermore, informants (interviewee 1, 2, 3) explained that the lobbying organizations had a minimal structure where a small number of full-time employees coordinated between various parties (banks, regulators, and ministries) and utilized the experts from mostly the large banks on a voluntary basis to help them draft the lobbying documents.

Since banking regulations were affected by multi-layered standards (national, European and international), the large banks and most of the local Swedish lobbying organizations participated with many lobbying organizations of interest at multiple levels both directly and indirectly, including European and international, in order to influence regulations and standards at various levels. These associations also allowed the organizations to use their resources wisely by limiting their expertise, and by pooling resources through collaboration. As informed by interviewee 2: *"They (European lobbying organizations) have a lot of contacts in Brussels, for example, with the commission and also with the parliament. But when it comes to the council, they are a bit dependent on associations in the different countries because for example we have contacts with the Swedish Ministry of Finance and the same thing goes for all other countries."* These associations were also mostly mired in the "political rationales" that supported specific changes of technicalities in favor of the parties they represented. With issues where collaboration did not work, the actors endeavored on their own. As interviewee 3 stated: *"sometimes we can make some action together but often in the big framework as the Basel III there are separate interests which you have to take action for."*

Apart from lobbying, the banks and their lobbying organizations also wanted to get information on standards as early as possible, since the banks needed to prepare in advance for the changes. As informed by our informant at a major Swedish bank (interviewee 6): *"We have people in the bank and our lobbying organizations that hear about regulations before it leaves Brussels, and we start preparing."* To

understand the required changes, the banks and the interested parties were actively pursuing "forewarning" listening mechanisms to latch onto what changes might come. This listening was achieved by public or private contact with regulators/standard setters through multiple channels: direct contact, through lobbying organizations or by monitoring the websites of the relevant authorities. As informed by several informants in the bank and the lobbying organizations, to optimize the resource usage, the organizations prioritizing issues as they came by. Interviewee 3 stated: *"we have to be concentrated on what is happening right now. So much is happening in this - So much new regulation going on. I guess you do not have time to see over the bigger picture."*

On the issue of the short-term liquidity, analysis of our documents and interviews reveal that the banks and the lobbyists wanted liberal banking standards and regulations that did not change the status quo too much and helped them avoid investment due to regulatory changes (see fig 1.b).

Selective interventionists

The Consultants

The consultants mostly intervened on topics that could be *potentially economically beneficial* for their companies or their core areas of expertise where standard setters or regulators explicitly sought information. To achieve this objective, the consultants were also interested in debate, knowing what is happening, and which way the wind is blowing. The consultants used websites, as well as sometimes lobbying organizations and even their direct lobbying wings to understand and influence future changes in standards and regulations.

The consultants argued for their limited involvement by linking their arguments to their professional boundaries, skill sets, and expertise based on well-accepted categorizations (such as specific standards, or technology). For example, the financial consultant (interviewee 12) explained that his core work deals with reporting, conceptual models, and risk frameworks and that recently his team has started working on what he calls the second generation of risk models that use advanced classification and calculation techniques. He (interviewee 12) further argued that since new short-term liquidity regulations do not involve large changes that could be potentially financially rewarding for his company, he did not participate actively. He agreed that in the past, on the BASEL II, he along with his colleagues had directly sent a comment letter to the BCBS. The technology consultant (interviewee 11) argued that she works mostly with technology and that her focus is on selling software, where the configuration of the software and its utilization could be customized for the client. She (interviewee 11) argued that her company is focusing on quantitative enterprise models and stress testing, especially in areas where regulation and standards are well established. She (interviewee 11) informed that her company has a lobbying wing that

mostly monitors legislation on an international and European level. The accounting consultant (interviewee 13) drew a boundary of his work based on the expert areas outlined in financial reporting standards and argued no impact from the Basel standards on the short-term liquidity measurement for his non-involvement. This argument on expertise in a specific area was also used to promote collaboration between different consultants during the implementation of standards by the banks. For example, when asked if they also work on conceptual models, the technology consultant (interviewee 11) explained that their expertise is technology and that they work with financial consultants on conceptual modeling. Similarly, the financial consultant (interviewee 12) argued that his company works with other companies when it comes to technology and implementation issues.

In summary, our analysis of the interviews and the archival documents reveals that the consultants participated selectively in the enactment of short-term liquidity measurement standards. Their selection depended either on changes bringing more business or explicit information seeking by the standard setters and regulators that directly appealed to consultants' core expertise.

Insert Figure 1.b

[A chronological story of the short-term measurement of liquidity](#)

In this section, the case for framing and reframing of the standard of short-term liquidity measurement for the Swedish banking system is presented chronologically. The case story revolves around different measurement definitions that evolved from the existing banking practices (see fig 2).

Insert Figure 2

[Background: The traditional practice of matching cash inflows with outflows](#)

A classical definition of liquidity revolves around the matching of cash inflows with cash outflows. This definition is tightly coupled with the classic economic theory of banks as financial intermediaries, which, in its simplified form, states that since banks provide illiquid loans, while allowing depositors the ability to withdraw liquid funds at par value at a moment's notice, the match between demands of cash outflows with the supply of cash inflows becomes important for their well-functioning. This is also one of the most traditional practices in the banking system when mitigating liquidity.

In 1974, the BCBS was established as an international actor with the purpose to foster cooperation between international banking supervisory agencies, in the aftermath of the international currency and banking crisis. One year after its establishment, the BCBS issued a concordat document focusing on supervisory coordination on liquidity, solvency, and foreign operations. The concordat focused primarily on the coordination principles between supervisory agencies, but the significance of liquidity mitigation was manifested in the texts.

In 1987, the first organized step towards a self-regulation system of the banking sector was taken, when BCBS started to formulate the Basel I accord. In this document, BCBS promoted a flexible, high-level principle which, under the policy of self-regulation, allowed banks to perform their risk management in accordance with their individual needs and business requirements. Five years later (1992), BCBS issued a separate “sound practice” document addressing the measurements and monitoring of liquidity in banking operations. This was the first document by the BCBS that detailed on the liquidity measurement. It was based on a survey of existing practices at large international banks. Apart from an half-page preamble, which posited arguments on the importance of liquidity measurement and the development of liquidity measurement through dialogues between the banks and the supervisors; the document highlighted four important aspects of liquidity measurement practices in banking: (a) the measurement of liquidity as a match between cash inflows and outflows; (b) the measurement and monitoring of liquidity in different currencies separately; (c) the measurement and monitoring of liquidity in short as well as long-time horizons; (d) the stress testing or scenario analysis of liquidity considering scenarios of bank specific crisis as well as general crisis. Also, the document included details on what type of assets and liabilities banks should consider while measuring liquidity. Furthermore, the marketability of assets, the contingent nature of liabilities, and other needs, such as clearing facility, were highlighted as important. These high-level principles became the basis for further development.

Due to the banking crisis and failures of the 1990’s, the policy of self-regulation was abandoned with the Basel II accord, officially initiated in 1999. Concerning liquidity risk, the BCBS started to put more emphasis on concrete and varying banking practices of liquidity risk measurement. Consequently, after eight years, the BCBS published a new “sound practice” document in 2000. This document again provided high-level technical principles on matching cash inflow and cash outflow for the liquidity measurement based on a BCBS survey of established banking practices. However, in contrast to the previous version, the preamble of the document grew heavily in size, arguing to posit the importance of liquidity and continuity of the BCBS’ work on liquidity.

As highlighted above, this era represents the evolution of one abstract definition of liquidity measurement as a match between cash inflows and cash outflows. The diversity of liquidity measurements in banking practices in use were allowed and acknowledged by the BCBS. Thus, the instrumental understanding of liquidity practices had started to be conceptualized as important, along with the exploitation of arguments on declining reliance on core deposits, increasing reliance on wholesale funding and financial market turmoil prompting a review of liquidity measurement approaches.

Phase 1: Changing the Meaning: Abstraction of alternatives

At the turn of the century, financial groups had evolved to become a popular business model among major bank corporations, where retail and commercial banking, were complemented by insurance companies and advanced investment banking subsidiaries. Consequently, in 2006, the BCBS published a study on liquidity measurement practices in financial groups. The main aim of the document was to collect and disseminate information on liquidity measurement among the BCBS-members. Henceforth, regarding liquidity measurement, the document highlighted three types of metrics used by the participating banks: a) a ratio of available liquid asset and total cash outflow requirement b) the cash inflow and outflow measurement, and c) a combination of the two approaches.

However, the turmoil of the financial market of the mid-2007 changed the rules of the game. As a response, BCBS took action in February 2008 and argued to expand the scope of the 2006-document in order to set the stage for more standardized monitoring of the liquidity measurements used by its members. Apart from reciting the importance of liquidity creation mechanism, a number of arguments were utilized by the BCBS to present the pressing need for an adjustment of the liquidity measurement: a) changing funding reliance on more volatile capital markets instead of traditional retail deposits; b) financial innovation of securitization leading to building up of loan inventory, and rapid shift in demand of funding capacity; c) complexity of financial instruments leading to heightened demand for collateral, in-transparency and uncertainty of liquidity and its rapid and unanticipated exacerbation of stress conditions; and d) real time payments and connected markets enhancing interdependence of different geographical regions and making intraday liquidity management more complex and risky.

In June 2008, the document was followed by the publication of a draft consultation version, and the final version was published in September 2008. All these versions utilized similar arguments for the strong need for action. Instrumentally, however, the documents emphasized the same high-level liquidity measurement guidelines as the document of 2006.

At the same time, a similar evolution was going on at the European level. On the European level, Directive 2006/48/EC¹ recommended banks to have sound policies and processes for the measurement and management of their liquidity (matching of cash outflow and inflow) on an ongoing and forward-looking basis. This directive promoted banks to consider alternative scenarios and to review regularly the assumptions concerning the liquidity calculation. Furthermore, in June 2008, the CEBS published a consultation document. The preamble of this consultation document highlighted that the document was based on a survey on liquidity risk measurement, carried out in 2007, in close cooperation with the BCBS and the Banking Supervisory Committee. The survey utilized experts from the lobbying organization (the European Banking Federation, and the Institute of International Finance) and credit rating agencies. This document in its preamble put the political consideration of cooperation of the lobbyists and the international standard setters and later focused on the instrumental principles for liquidity measurement separately. The document highlighted that the CEBS was looking into supervisory practices and liquidity measurement practices in different European countries. Instrumentally building on the BCBS document of 2000 and 2006, this document confirmed the three approaches of the liquidity measurements. Also, the document also propounded liquidity stress testing in different scenarios as important for the banks. The works of the BCBS and the CEBS of this era were also consolidated by the European Commission formally and reflected in the Capital Requirement Directive (CRD) II of October 2008 ('CRD II', IP/08/1433)².

During this period, the banks and their interest organizations helped the BCBS as well as the CEBS to understand gain insights into their liquidity risk measurement practices. These actors mainly contributed to refining the understanding of the authorities on issues they deemed fit to be of their expertise. The importance in this phase was on sharing instrumental information on liquidity issues.

In summary, this era represents the identification of three different abstract definitions of liquidity measurement by the BCBS as well as by the CEBS: a ratio of available liquid asset and total cash outflow requirement, the match between inflow-outflow, and combined approaches. These liquidity measurements were derived from the existing banking practices. The diversity of liquidity measurement practices in use were allowed and acknowledged by both the BCBS and the CEBS.

¹Directive 2006/49/EC was also an important accompanying capital directive but did not deal with liquidity risk measurement or management

² In July 2009, CRD III ('CRD III', IP/09/1120) was proposed as well but it did not detail on liquidity risk measurement or management.

Phase 2: Selecting a new dominant definition of matching excessive cash outflows with available liquid assets

The financial crisis of 2007 had pushed the BCBS on a path to make the liquidity measurement and monitoring practices stricter and more stringent. The work on this reform started in 2008 when a working committee of the BCBS was established to take stock of the liquidity measurement approaches practiced by the banks. In 2009, this finally led to BCBS proposing the short-term Liquidity Coverage Ratio (LCR) as a generic standard for short-term liquidity risk management. In the preamble of the document, the existence of inaccurate and ineffective liquidity risk measurement prompting financial crisis was claimed as rationales for the needed reform.

This document was the first that promoted the ratio approach of matching excessive cash outflows with available liquid assets as the preferred approach of short-term liquidity measurement. However, there were varying levels of discontent among the members of this committee concerning the LCR-measure. Alternatives like matching cash inflows and cash outflows were still a preferred choice among several members. Moreover, there was an internal debate on the treatment of different liquid instruments, such as covered bonds. Seeing resistance from some members and this existing controversy, the BCBS decided to publish its consultation and seek external viewpoints from various stakeholders. Thus, instead of the traditional matching of cash outflow with cash inflow, the following LCR-model was proposed as the new risk management measure:

**LCR = Stock of High-Quality Liquid Assets /Total net cash outflows over
the next 30 calendar days**

**The stock of High-Quality Liquid Assets = Risk-based factor * asset
value**

Also, BCBS declared that new LCR measure should be implemented by its members by the year 2015, the latest.

Qualified covered bonds, depending on their credit assessment, received either an 80% or a 60% factor for calculation of highly liquid assets in the document of 2009 (See fig 2 for details). In Sweden, this treatment of covered bonds became a highly contentious issue between the Swedish banks and the BCBS. While the BCBS was introducing a new liquidity measurement framework, the European Commission was separately launching a consultation on the possible changes to capital requirement directive (termed as CRD IV) in Feb 2010. This consultation endorsed the views of the BCBS work on liquidity and proposed to treat covered bonds as stipulated by the BCBS 2009 document. However, the document also invited specific responses on the treatment of covered bonds and highlighted that the BCBS had been mandated to carry out a Quantitative Impact Study (QIS) to help the EC in determining the treatment of covered bonds. The CEBS publicly responded to the proposed EC CRD IV consultation document in April 2010 to consider its QIS and its result for standardizing the treatment of covered bonds.

On the Swedish level, the Swedish FSA got the mandate from the government in 2010 to start to reform the liquidity risk management, based on the BCBS document of 2008. Considering this mandate; the FSA officially initiated public debates on the changes of liquidity measurement in January 2010. At the first of these occasions, the chief economist held a presentation titled "Liquidity Regulations and Their Effects," which set the scene for LCR for the Swedish banks. This document utilized the arguments and instrumental information from the BCBS' document of 2009. The document also highlighted uncertainties in the traditional use of liquidity instruments in banking.

Implementation in Sweden: resistance from the banks and their interest organizations

Representing the Swedish banks, the Swedish Bankers' Association (SBA) was the first lobbying organization that sent a direct public response to the 2009 document of the BCBS in April 2010. In this document, SBA clearly emphasized to be the legitimate representative of the Swedish banking sector. Its general response was to support the initiative on monitoring of Liquidity Coverage Ratio to manage short-term liquidity. However, the proposed measure was claimed to be too detailed and too costly for the banks, the society, and the economy to handle. It was argued that since the proposed change tied up more capital in the banks, it would promote banks to maintain/enhance their profits by increasing interest rates for long-term lending. It was also claimed that the ratio approach would exacerbate the accelerated liquidity problems for transparent and ethical banks, and, at the same time, promoting non-transparent banks to resort to untrue and unethical reporting. Furthermore, another issue that was raised was towards allowing countries like Sweden, where direct government debts are scarce, to also include and treat fairly the covered bonds as better liquid assets because high-quality assets always guarantee such bonds. To stress the point of covered bonds, their good treatment in the market and also by credit rating agencies was cited. It was cited that the proposal if put to practice, will bring less incentive for banks to provide long-term debts to persons or non-financial enterprises and would promote only investment in marketable liquid securities by the bank. This, in turn, was also cited to increase the lending interest rate by banks and thus was related to the cost for society and economy as a whole.

The SBA also attempted to influence the regulation at the European level. Since European authorities had already expressed their willingness to consider the covered bond issue by studying the European market, this response did not stress on the covered bond issue. In response to the EC on CRD IV consultation in April 2010, SBA identified itself with the Swedish banking sector and Sweden and cited Swedish early implementation of the Basel II in 2007 and better management of Swedish banks during the financial crisis to highlight positive aspects of the Swedish banking sector upfront. In this document, the general countering conceptual argument of the SBA was on similar lines of understudied impact on several actors

(economy, society, instruments, macroeconomics, and financial market), too many and massive change initiatives at the same time and too many incomplete and unclear definitions in the EBA's proposal. Here on the issue of liquidity monitoring in general, similar lines of conceptual arguments were proposed as were in response to the Basel Committee. Also, soft control was proposed as the preferred mode for liquidity control than hard control proposed in the tighter control. Again impact on lending rates, and capital structure (leverage) and too frequent reporting were cited to hamper banking business by making banks invest in IT infrastructure. Too narrow and stringent definition was cited not to fit varying business models, varying sizes and varying markets and varying institutions existing in the current European Union. After the Basel Committee and the European Union-wide response, one proposal responses was also sent to the FSA which has started engaging various stakeholders on its own on the liquidity-related issues. This response was sent on 16 August 2010 on the "draft regulation of liquidity risk management for credit institutions and investment firms."

In summary, this era included a selection of the ratio approach of liquidity measurement led by the BCBS and acquiesced by the European and Swedish authorities. Since the BCBS also has representation from national, as well as European supervising agencies, the controversies surrounding the alternative approaches were side-lined internally at the BCBS working committee. However, controversies surrounding treatment of liquid instruments were highlighted separately by both the European as well as the Swedish authorities. Also in this era, the political values were demarcated in the formal documents, mostly presented as a preamble to the proposed instrumental measurement standards. When Swedish banks came to know of changes from the BCBS and the European authorities on liquidity measurement, they first decided to counter the proposed change by indulging in conceptual and economic arguments. At this stage, the instrumental information provided was deeply entrenched with political arguments, and the interest organizations relied mostly on soft facts such as conceptual models and economic rationales, especially in the early stages of lobbying. To provide further emphasis, the banks and the interest organizations claimed to speak, not only on behalf of those they represented but also on behalf of the functioning of the financial market as well as the Swedish society as a whole.

[Phase 3: Settling a new dominant definition where covered bonds get better treatment](#)

After protest from the Swedish banks, the qualified covered bonds received a factor of 85% (equal to similarly rated corporate bonds) in the final document of Dec 2010 by the BCBS. The BCBS maintained this treatment of covered bonds in its subsequent documents. In 2013, LCR was officially introduced as the Basel III framework. By 2014, the committee pushed for closure on the LCR implementation.

While the BCBS was settling its issues, the European authorities had started intensive discussions to close the liquidity measurement issues at the European level. In this regard, the year 2011 was utilized by the EBA to form a political ground for the sweeping reforms that were directly tied to the proposed liquidity reforms. The liquidity reforms were politically endorsed by blaming the change on the financial crisis and emphasizing the initiatives for harmonization and a single rulebook in Europe.

In the year 2012, the EBA started several instrumental exercises to calibrate the risk factor for covered bonds. For example, On 2 October 2012, a report on the instrumental exercise of LCRs implementation was published by the EBA. This exercise assessed the problems and shortfall of the capital of the current European banks based on the temporary definition of the LCR proposed by the BCBS.

The instrumental exercises to calibrate the risk factor for covered bonds were linked to the new Basel standards of LCR starting in 2013. For example, in a document issued in February 2013, the EBA utilized the BCBS instrumental framework and their political arguments to discuss the issue of high-quality liquidity assets, including covered bonds. Several instrumental studies and EBA's calibration studies were highlighted to compare covered bonds to the government bonds and check their liquidity in normal as well as stress conditions. This discussion paper was aimed at understanding high-quality liquidity assets and promote Europe-wide discussion on the same. The widespread historical use of covered bonds and European regional differences of quality of the same were also highlighted. The EBA accepted that the issue of high-quality liquid assets to be not purely technical in the absence of instrumental studies and asked for more information on a database for conducting instrumental studies on the same.

This discussion paper was followed by a definition of what constitutes a high-quality liquid asset in December of 2013. This document again followed the understanding of the February 2013 further and demonstrated analysis on the feasibility of covered bonds and their impact on stress conditions as well as different risk-based factors. The issue of covered bonds was further analyzed by instrumentally in 2013 on a case by case basis on different currencies and countries. In summary, there was a lot of instrumental fact-laden, concept-laden and econometric impact driven discussion promoted by the EBA in 2013 to settle the issue of covered bonds and high-quality liquid assets. The LCR amendment process is currently ongoing for final closure.

On the Swedish level, in Feb 2012, the Swedish authorities set the stage for early implementation of LCR in 2013 (the Basel Committee deadline was 2015), despite noting the better resilience and lesser impact of the financial crisis on Swedish banks. Since the EBA has still not settled the issue of covered bonds, Swedish authorities issued a consultative memorandum and argued to replace it with the EU-wide compliant regulation later.

Resistance from the Bank and the lobbyists

The Swedish lobbying organizations mainly directed their focus at the Swedish authorities in 2011 and 2012 since Sweden had started engaging various stakeholders on its own on fixing the early implementation of the liquidity framework. Later, in 2013, the focus from the Swedish lobbying organizations shifted to the European authorities that had launched massive reforms on liquidity with more details.

On the Swedish front, after the August 2010 response to the FSA, two more proposal responses were sent to the FSA by the SBA. One response was sent on 25 February 2011 on "proposals for new regulations on the reporting of liquidity risk." The second response was sent on 5 September 2012 regarding "draft on a quantitative requirement for liquidity coverage ratio and reporting."

On the European level, in a response sent to the European Banking Authority on 21 March 2013 titled "discussion paper on retail deposits subject to higher outflows for the purpose of liquidity reporting in the draft Capital Requirement Regulation (CRR)", SBA cited complexity of the model, too many risk factors, very high cost of implementation and too tight control with too many indicators to counter the proposed changes. In this regard, the interest organization also cited inconsistencies of the proposal when compared with the Basel framework's suggestions. A simplified approach for reporting and risk factors was proposed. SBA again cited a specific case of small banks where this approach will lead to the competitive disadvantage to them.

In another response sent to European Banking Authority on 21 March 2013 on "discussion paper on defining liquid assets in the LCR during the draft CRR," SBA endorsed the view of the EBF and again highlighted the demerit of the suggested approach to be too complex. The response also cited the case of covered bonds again separately. Here a comparable instrument Residential Mortgage-Backed Security and its simplistic assessment requirement while complex assessment requirement for the covered bond was cited as a point of disconcerting. By doing so, issues related to judgment and treatments of wrong judgment being not covered were cited as another loophole in the document. The paper response of the EBF to the same issue was also attached to the position paper.

The response paper sent to European Banking Authority (EBA) on 26 Feb 2014 was on "draft methodology for assessment of liquidity and funding risk under Supervisory Review and Evaluation Process (SREP)." This document was concerned about the assessment of liquidity and funding risk by supervisory authorities in the European Union. Again, in this document, the argument started with a hint of negative tone on a very wide range of coverage by the EBA on several issues. The argument further developed to leave the reporting requirement of the certain specific type of calculations and indicators, relating to intraday

liquidity and longer-term structural liquidity risk, citing unfinished and unsettled regulation on the calculation of such indicators. The association proposed to focus on those indicators where the regulation regarding calculations was already in place. Also, specific reporting on liquidity risk being aligned with capital reporting was considered unsuitable because of differences in tools, time horizon and methods of calculation. The non - flexibility for banks on running their stress tests scenarios, supervision on funding planning requirement, supervision on the mismatch of maturity assessment and more detailed reporting on asset encumbrance³ were problematized by questioning the validity of such control concerning one-size-fits-all approach and additional burden on banks.

The communication sent to the European Commission on 31 March 2014 titled "Public Hearing on LR (Liquidity Risk) and LCR (Liquidity Coverage Ratio)" did not explicitly mentioned the identity of the organization. In this response, references to the Basel Committee recommendations were cited to purify the calculation mechanisms. Again, the document problematized based on the rhetoric of incentive for bad behavior on the banks part to circumvent the requirements and thus failing to achieve the goal of financial stability. The details in this response sometimes lacked accompanying rationale. However, in some cases, competing ideas were used to show the chosen ideas as better. In some cases, alternative solutions were also proposed.

The consultants mostly provided information on non-contested topics or areas where standard setters or regulators explicitly sought information. The consultants refrained from direct active participation on any side in the case of Liquidity reform. There were very few responses from the consultants to any of the authorities before the settlement phase. The EBA, in the case of LCR, received some consultation from the consultants specifically where they sought information on the impact of changes.

The consultants used values of expert community on data and methodology to suggest novel approaches to the regulators in understanding the impact of the proposed regulation. Regarding arguments, the consultants used their expertise and experience to guide their writings and exerted their opinion by using terms such as "we believe," "Based on our experience," "we recommend/commend/imagine that," and similar wordings. In doing so, the consultants also extolled their experience by exemplifying their "track record" and "expertise" in the specific area. These arguments mainly served two purposes. First, it helped consultants in emphasizing their expertise. Second, this also helped them in providing their opinion selectively, on whichever issue of the proposals they deemed interesting.

³ Asset encumbrance is a claim against a property by another party

The consultants provided technical information where the regulators and the standard setters explicitly sought information. Some consultants agreed that in specific cases, other than where standard setters explicitly seek information, they did participate in the due processes. This selection depended on their interest in exhibiting their expertise to the banks or their interest in understanding the effects on their services that might arise with such regulations. The technical information was mostly embedded in the value-based arguments displaying their experience. For example, in some specific cases, the regulators asked for data to understand the impact of proposed changes. In such cases, the consultants with specific expertise provided the information. Some consultants just forwarded their earlier related works, such as position papers, consulting reports or academic reports, without specifically providing the information separately. The consultants also proposed alternative technical solutions in many cases on the parameters and metrics.

In summary, in this era, the EBA took a dominant role in calibrating and settling the issue of covered bonds by launching several instrumental studies. The Swedish authorities chose to have an early implementation of LCR and promised to make the regulation EU compliant as and when the EU wide regulations settled. The lobbyists adopted several defensive tactics to win favor from authorities for the better treatment of covered bonds in the standards. In this regard, since desired results were not achieved, more conceptual models and more instrumental information were put on the table. For example, the information supporting the higher quality of liquidity for the specific instruments that were considered of lower quality liquidity in the proposed standards (e.g., historical widespread use of covered bonds in Europe, and the historically high-quality liquidity of covered bonds by rating agencies). Also, the facts on comparability of liquidity and risk of desired instruments with other instruments were presented. Monotonous writing in the later cycles of position papers was also used to create a sense of stylized facts. Since collecting and preparing documents based on information is costly and requires time, the banks and interested organizations seemed to avoid fact-laden documents until they were proven to have failed to have an impact (cf. Giner and Arce, 2012; Reuter and Messner, 2015; Tutticci et al., 1994). Also, the bank and interested organizations presented no facts where they agreed to the proposals by the standard setters (compare Giner and Arce, 2012; Reuter and Messner, 2015; Tutticci et al., 1994).

Discussion and Conclusion

The genesis of this paper lies in the tension between the two dichotomous interpretations of standard setting in the accounting literature, viz., the political and the technical. The political interpretations predominantly put a focus on the political acceptance and legitimization of the resulting regulations. The

technical interpretations, on the other hand, put the focus on the instrumental quality of the output standards.

In contrast to the two dichotomous interpretations, this paper argues that the standard setting process should be looked at like a process that is built around the interplay of the political arguments and instrumental information. To unpack our case, we utilized the concept of framing and overflowing to show how accounting devices are framed by the differing interplay of political arguments and instrumental information. This section first discusses the implication of our findings on different interplays of political arguments and instrumental information deployed by the different actors in the accounting standard setting literature. Later on, the implication on the literature of framing and overflowing are discussed. Finally, conclusion and future research opportunities are highlighted.

Standard Setting as an Interplay of information and arguments

Our analysis shows the three approaches of the interplay of information and arguments utilized by the stakeholders. All these three interplay mechanisms attribute radically different role of information and arguments. First, loose-coupling where information is presented separately from the political arguments. In this approach, arguments merely serve the purpose of legitimizing actors' viewpoints, and the information is presented decoupled from arguments as much as possible in a dull and prosaic manner to dissuade its displacement by other actors. Second, tight coupling where politicized, unauthentic and biased information is tightly coupled with the political arguments. This approach utilizes arguments as a vehicle to pass politicized, unauthentic and biased information that allows actors to counter viewpoints of other actors. Third, selective-coupling where instrumental information is coupled tightly with the political arguments. However, in the case of selective-coupling, the stakeholders presented information either on their area of expertise or where other stakeholders explicitly sought information. Consequently, in the selective-coupling based approach, political arguments become a vehicle to bring credibility to the stakeholders' information.

Discussion of the interplay of information and arguments contribute to the literature on standard setting in accounting in two distinct ways. First, this study takes Hoffmann and Zülch (2014) approach of arguments as a vehicle for information exchange and extends it further by showing how different interplays of information and arguments served as exchange vehicles for each other. These specific exchange approaches were designed for specific purposes. E.g., the prevalence of loose coupling was

aimed at the promotion of instrumental information by separation from the political means. The prevalence of tight coupling was aimed at the promotion of political interests using no or biased instrumental information. The utilization of selective coupling was aimed at the promotion of instrumental information using political credibility.

Second, the three interplay approaches of information and arguments were used by the different stakeholders at different phases of enactment of the short-term liquidity risk measurement approaches (see fig 3.a and 3.b.). E.g., the first approach of loose coupling was utilized by different stakeholders in the slightly different phase of standard setting. The standards setters used this approach throughout different phases. However, the banks and the lobbyists used this approach in mature phase when other political approaches failed. In the beginning, the lobbyists and the banks used the tight coupling approach.

Thus, these findings address the call from Giner and Arce (2012) to examine the behavior of different stakeholders longitudinally or historically. The historical understanding in our case explicates the different behavior of stakeholders contingent on external controversies as well as controversies engendered by the standards themselves.

Insert Figure 3.a

Insert Figure 3.b

Measurements as a result of framing and overflowing

We have established two reasons that lead to destabilization of the frame. First, as illustrated by several scholars (cf. Christensen and Skærbæk 2010; Skærbæk and Tryggestad 2010; Vinnari and Skærbæk 2014), the destabilization of the frame is *“inextricably intertwined with the emergence of unexpected events”* such as the financial crisis of 2007-8 in our case. Second, unlike Vinnari and Skærbæk's (2014) plurality of frames, we focus on the singularity of frames and obviation of their unidentified ties to the broader socio-technical world by the interested actors as the mechanism for the destabilization of frames.

Our case demonstrates that different emerging measurements restricted the boundaries for the interplay of the instrumental information and political arguments. In fact, as the settlement of the measurement progressed, the debates became more focused and centered around specific controversies where consensus was not reached. For example, the debate started with broad and vague conceptual and economic terminologies, and several impact mechanisms and many affected actors and started getting focused around the treatment of covered bonds in the latter stages and impact on banks and the banking sector. In doing so, our study extended Callon's (1998a, 1998b) ideas that once measurements are framed, they restrict debates and become anti-political. This restriction is linked to the isolation and detachment that calculations rely on. The protagonists of the frame, in our case the BCBS, were able to isolate the frames relevant for calculations using loose coupling of instrumental information and political arguments surrounding it.

Our case also demonstrates that when a measurement was framed temporarily, it became the focal point of controversy. The temporarily framed measurement then attracted the scrutiny of different actors and thus became the conduit to the political controversies. Our findings thus also confirmed the criticism that measurements themselves become a conduit to political controversies and bargaining. We argue that this reframing was possible because despite seeming isolation of temporarily stable frames of calculation, calculations, in reality, were always connected to the broader socio-technical worlds. This overflowing tie with the broader socio-technical world allowed actors in bringing the inadequacy of measurements.

While performativity of accounting devices on practices is well explored in the extant accounting literature, we explicate influence of practices on accounting devices and standards. While such influences have been talked about by Callon (1998b) himself, there has been a lack of evidence on the same. To explain this influence, we utilize the concept of "mediating instrument." Extant studies on accounting devices as "mediating instruments" have demonstrated the power of accounting measurements, in facilitating common representation between the different domain of actors and envisioning intervention by chalking out possible scenarios (Christner & Strömsten, 2015; Kurunmäki & Miller, 2011; Miller & O'Leary, 2007). By using this analogy of mediating instrument, our case demonstrates how different measurement approaches of short-term liquidity utilized existing heterogenous practices to frame an understanding of accounting devices that were then included in the regulatory standards. As depicted in our case, a practice influenced by regulation in all its stages of development. Moreover, the practice was what was always used to frame as well as construct the overflowing nature of the regulatory frame.

Concluding Remarks

In conclusion, our analysis shows that development of accounting standards, such as the short-term liquidity measurement of Liquidity Coverage Ratio, can be seen as an interplay of political arguments and instrumental information of different actors. The literature on standard setting in accounting has, in our view, been too focused either on the political consensus and legitimization or the instrumental usefulness. Our criticism of this dichotomous view of standard setting in the literature is based on the emerging view that standard setting is neither based on purely instrumental nor on an absolute political consensus (Barry, 2002). We do find that there is an acknowledgment of the interplay of instrumental and political in many existing research articles, but such interplays are seldom developed in detail (Hoffmann & Zülch, 2014; Morley, 2016; Reuter & Messner, 2015; Zeff, 2015). We also find that some emerging accounting studies depict the interplay of political arguments and instrumental information non-saliently, but by subjugating the instrumental to the political. Therefore, we argue that more research is needed on understanding the standard-setting process as an interplay of political and instrumental.

Accounting standard setting is an important activity and considering its proliferation to hitherto untouched domains such as sustainability reporting and risk measurement, we call for more studies on accounting standard setting other than financial accounting. In addition, we also argue the need to explicate better the broader context in which different accounting standard setting processes take place. Our future research suggestion matches with what Cooper and Robson (2006) dub as lack of studies in the extant accounting literature on *"multiple sites of accounting regulation and professionalization."*

Further, we have posited and demonstrated that the concept of framing and overflowing is useful not only to explicate the isolating effect of accounting devices but also to explicate their vulnerability to overflowing. In this regard, we only focused on the devices of measurements in this study. We posit that future studies could extend our understanding of the interplay of political and instrumental by studying framing and reframing of texts and other inscriptions as regulations. In addition, unlike the previous studies of accounting measurements as mediators, we also show how the political and instrumental considerations shape the mediators of measurements themselves during their role as mediators. In our case, one set of measurement approach survived in the end. In the future, it could be useful to dig deeper into the level of remaining controversies since consensus and legitimization does not mean the end of discord and controversies (Barry, 2002). Furthermore, greater attention to the inter-relations between

different emerging accounting measurements could extend our understanding of how development trajectories of measurements are shaped.

Since we used publicly available documents and a limited number of interviews, our analysis spans a limited view of complex reality and does not consider private lobbying activities in detail. Consequently, we promote further research on including more private lobbying content to supplement our understanding of the standard setting. Moreover, our understanding of arguments, instrumental information, and their interplay was context dependent. Hence, we promote future researchers to explore and develop abstract categorizations of instrumental information and arguments.

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Tables

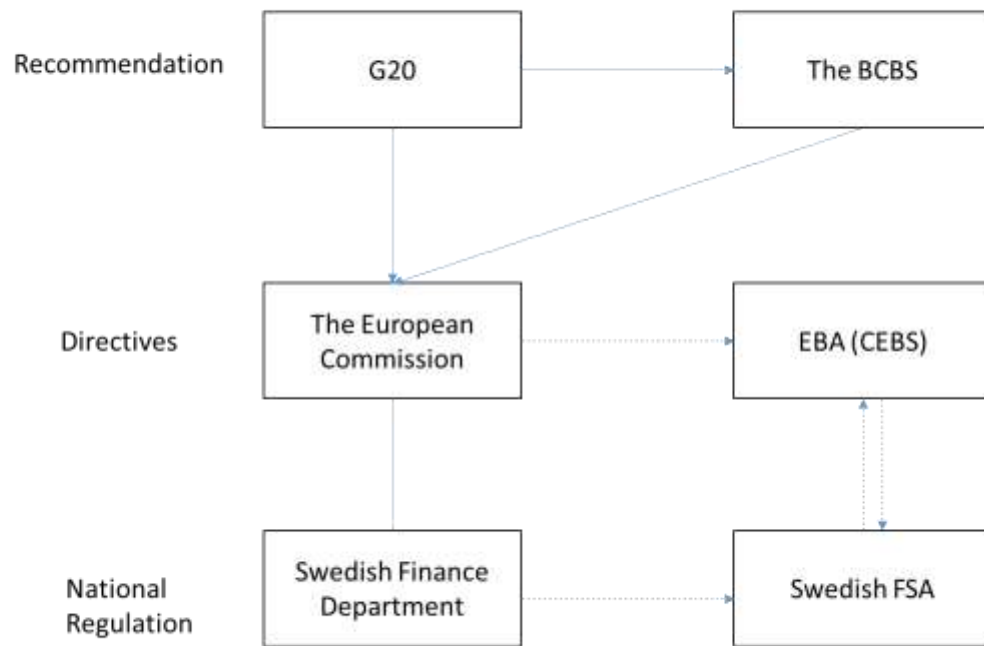
Interviewee No.	Actor	Title of The Interviewee
1	Swedish Buy-Side Analysts' Association	Chief Analyst
2	Swedish Buy-Side Analysts' Association	Chief Jurist
3	Swedish Banks' Association	Senior Advisor Legal
4	Major Swedish Corporate Bank	Previously Compliance Manager, Now Regulatory Reporting Manager
5	Major Swedish Corporate Bank	Risk Manager
6	Major Swedish Bank	Internal Auditor
7	Major Swedish Bank	Internal Audit Responsible, Basel Audits
8	Major Swedish Bank	Information Solutions and Data Manager, previously Innovation Solutions Head
9	Major Swedish Bank	Head Business Support Function
10	Major Swedish Bank	External Consultant, Change Management and Restructuring
11	Major Risk Management Software Consulting Firm	Head, Risk Solutions Advisory Nordic
12	Major Risk Management Process Consulting Firm	Partner, Consulting Financial Services
13	Major Risk-related Accounting Consulting Firm	Director, IFRS Consulting
14	BASEL Committee	Member Secretariat
15	Financial Supervisory Authority, Sweden	Responsible for Liquidity Regulation
16	Financial Supervisory Authority, Sweden	Legal
17	Swedish Entrepreneurship Forum/ Economics Expert	Manager
18	Swedish Export Credit Provider to SMEs	Senior Staff Counsel
19	Swedish Export Credit Provider to SMEs	Chief Financial Officer

Table 1: Interviews

Entity	Total Number of Documents
Swedish Buy-Side Analysts' Association	110
Swedish Banks' Association	399
The Basel Committee	22
The European Banking Authority	300
Finansinspektionen Sweden	58

Table 2: Archival documents studied

Figure 1.a: Different regulators and standard setters and their responsibilities in the Swedish Context



Reproduced from the FSA presentation by its chief economist Lars Frisell

Figure 1.b: Different actors and their intentions on liquidity risk measurement

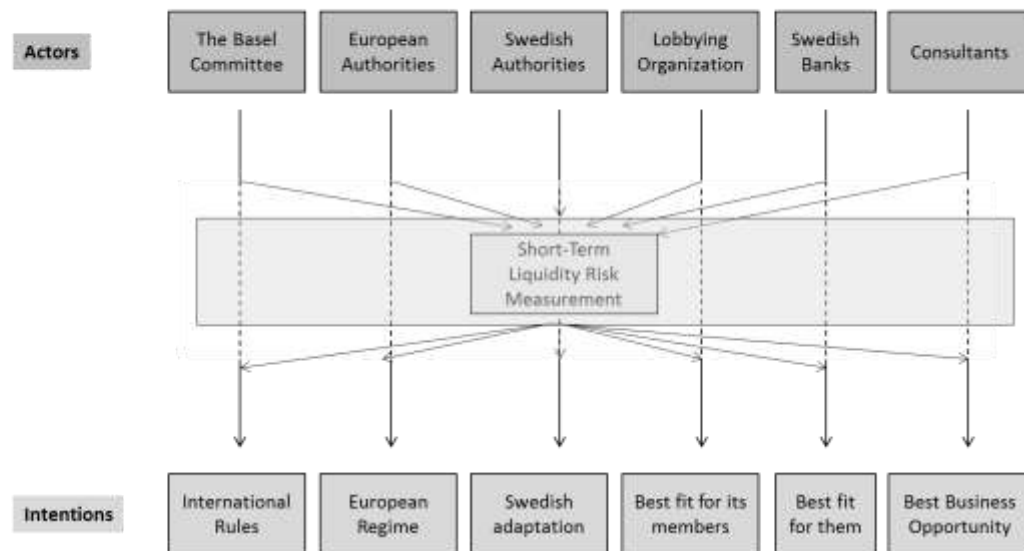


Figure 2: Brief timeline of short-term liquidity risk measurement (The BCBS Perspective)

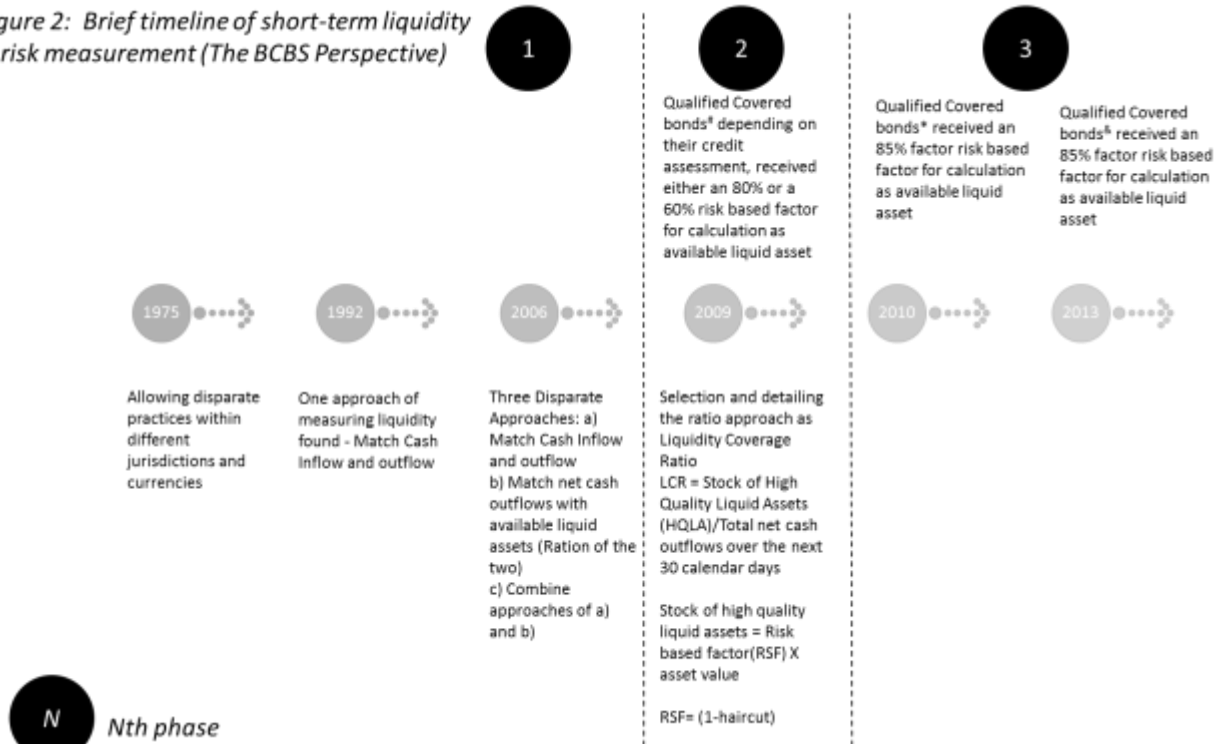
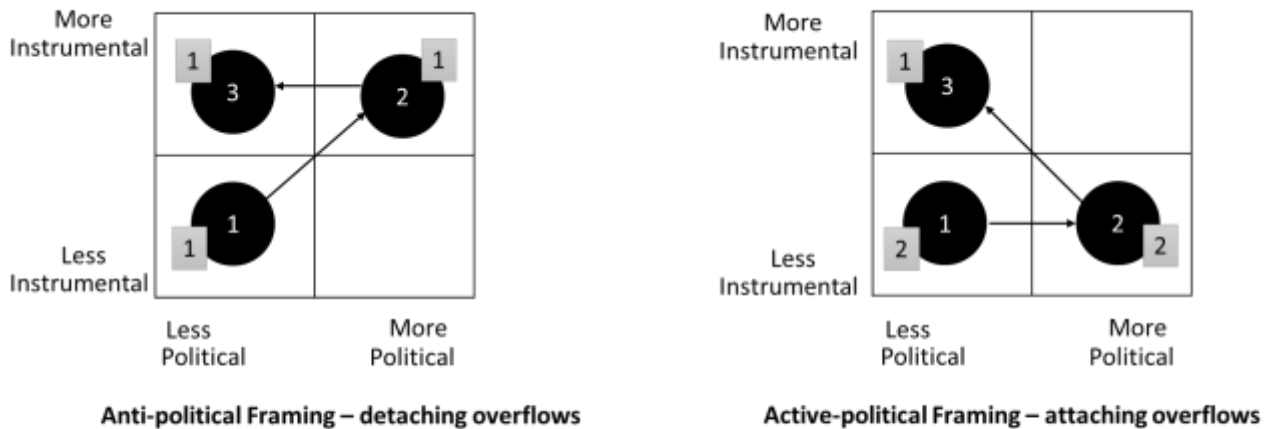


Figure 3.a: Contribution



N Nth phase

- 1 Separation of instrumental information and political arguments
- 2 Mixing of instrumental information and political arguments

Figure 3.b: Contribution

<i>Timeline</i>	2006	2008	2009	2013
Different Phases of Risk Measurement Development				
Phases	Abstraction	Selection	Settlement	
Driving force	Funding approach and technological changes in the banking sector	Financial Crisis of 2008	Diverging Actor Interests	
Doctrines	Self-regulation	Regulation	Re-regulation	
Distinctive activities	Understanding of different empirical practices by categorizing alternative approaches	Selection of one alternative approach and its elaboration	Settlement of distinct elements of measurement of the selected alternative approach	
Different Actor Behaviors				
General mode	Cooperation	Controversies on calibration and selection	Settling controversies on calibration	
Regulators and standard setters	Anti-politics - Separation of Political and Instrumental	Anti-politics - Separation of Political and Instrumental	Anti-politics - Separation of Political and Instrumental	
Banks and interest organizations	Passive collaboration	Active-politics – Mixing of political and instrumental (Political as a vehicle of instrumental)	Active-politics – Mixing of political and instrumental (Instrumental as a vehicle of Political)	

Paper II



Reinventing Operational Risk: Distancing Operational Risk from Operations

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Abstract

Based on 652 archival documents on operational risk (covering a period from 1980 to 2016) from the Basel Committee on Banking Supervision (BCBS) and responses from the lobbyists (banking associations, consultants and banks), this paper inductively examined how the BCBS and the lobbyists contributed to the framing of the calculation of operational risk? Following Benford & Snow (2000), Vollmer (2007), and Roussy & Brivot (2016); the paper utilized the framing theory to document the emerging interpretive scheme of the BCBS and the lobbyists as my theoretical lens. In doing so, this paper posits two important contributions. First, it demonstrates how the BCBS and the lobbyists framed the operational risk calculations in four different phases. Second, the results of the different approaches on operational risk calculations demonstrate that like other activity focused accounting instruments (e.g., activity-based costing), the calculation of operational risk allowed a number of different practices leading to non-transparency and non-comparability of operational risk reporting. This led to the withdrawal of the activity focused operational risk calculation by the Basel Committee on Banking Supervision. One of the main implications of my study is towards understanding how to balance control and freedom while deploying activity focused accounting calculations.

Keywords: Operational risk, Risk calculations, Framing

Introduction

Over the last three decades, banking risk-based regulations have inundated the banking sector catapulting “normative” risk calculations to the fore of risk management (de Goede, 2004; Power, 2007). The Basel reforms of 1988 (Basel I), 2004 (Basel II), and 2009 (Basel III) have repeatedly been cited as examples of risk-based regulations promoting “normative” risk calculations (Dewatripoint & Tirole, 2012; Haldane & May, 2011; Jacques & Nigro, 1997). In one stream of the literature, Risk-based regulations are shown to promote self-regulation by propounding “softer” meta-level risk calculations, leaving the mundane details of implementation to the banks (Black, 2005; Black & Baldwin, 2010; Langley, 2013). This self-regulation is purported to propound “freedom” to banking activities and avoid meddling with their strategy and profit-making matters (Curran, 2015; Huber & Scheytt, 2013). However, an emerging body of literature has started to question the thesis of self-regulation and “freedom” propounded in the risk-based regulations (Wahlström, 2006, 2009). In contrast to the “softer” and meta-level prescriptions, scholars in this stream, demonstrate that the risk-based regulations propound detailed rules and checklists for risk calculations, and promote disciplining of banks (Baud & Chiapello, 2016).

Recently scholars have started reconciling both the views on risk-based regulation. Scholars in this stream demonstrate that both the dichotomous viewpoints, expressed above, emerge due to the questionable assumption of a static view of regulations, where regulatory texts within a small fixed period were qualitatively examined to conclude about meta-principle or detailed prescriptions on risk calculations (Balthazar, 2006; Dionne, 2013). As a result, scholars, in this stream, demonstrate that the introduction of the Basel I framework in 1988, when risk-based regulations came into force for the first time, was indeed a manifestation of softer and meta-principle based risk calculations. However, as time passed on The Basel Committee on Banking Supervision (BCBS) added complex details to the different parts of the risk calculations (Balthazar, 2006; Dionne, 2013; Drumond, 2009; Herring, 2018). In essence, these studies question the static understanding of risk-based regulations in the qualitative studies and suggest exploration of the long-term dynamics of risk-based calculations to understand the evolution of risk calculations in such regulations.

Similar views on the lacuna of long-term understanding on evolution of risk calculations have been expressed by several scholars in accounting based studies (cf. Arena, Arnaboldi, & Palermo, 2017; Brivot, Gendron, & Guénin, 2017; Jordan, Mitterhofer, & Jørgensen, 2016; Thomsen & Skærbæk, 2018). Another broader stream of institutional accounting based literature (cf. Hopwood, 1987; Kurunmäki & Miller, 2013; Power, 2015) as well as the critical accounting literature (cf. Miller & Napier,

1993; Richard, 2015; Toms, 2010; Vollmer, 2007) also questions the short-term view of accounting calculations and encourages scholars to explore the evolution of accounting calculations. Similar calls to understand the long-term understanding of accounting calculation also reverberate in Actor-Network Theory derived accounting device and inscription based literature (cf. Busco & Quattrone, 2018; Robson & Bottausci, 2017). Motivated by a paucity of understanding on the long-term understanding of risk calculations, I inductively examined how the BCBS and the lobbyists contributed to the framing of the calculation of operational risk. Following Benford & Snow (2000), Vollmer (2007), and Roussy & Brivot (2016); I utilized the framing theory that allowed documenting of the emerging interpretive schemes in my case. I utilized an inductive examination since following Gioia, Corley, & Hamilton (2013), I did not want my findings to be biased by existing fragmented understanding of calculations in the accounting literature.

More specifically, I utilized the framing theory to understand the evolving meaning of the risk calculations. This was due to several reasons. First, understanding the meaning of the risk calculations was a common point among different streams of accounting schools specifically investigating the long-term understanding of risk calculation (cf. for example of a critical study - Kurunmäki & Miller (2011); for example of an institutional study - Power (2015); for example of an inscription based study - Themsen & Skærbæk (2018)). Second, risk calculations may seem an arithmetic operation, but they are open to interpretation and thus change *meaning* during their use (Vollmer, 2007). Second, risk calculations deal with translating uncertainties to calculable risk and since several known uncertainties get in the calculable domain and other unknowns emerge during a long-term understanding, uncertainties essentially modify the *meaning* of risk calculations themselves (Callon, Lascombes, & Barthe, 2009; Themsen & Skærbæk, 2018; Vinnari & Skærbæk, 2014). Third, risk calculations, like other accounting calculations, essentially represent an organizational space and hence, their meaning is tied to the dynamically evolving understanding of organizational spaces (Miller, 1994; Miller & Power, 2013).

To achieve my objective, empirically I focused on 652 archival documents on operational risk (covering a period from 1980 to 2016) from the Basel Committee on Banking Supervision (BCBS) and responses from the lobbyists (banking associations, consultants, and banks). I selected operational risk calculations due to two important empirical reasons. First, operational risk calculations represent a unique case where the BCBS first started pushing for adding details and flexibility to different types of calculations around 2001 (as an initiative towards finalizing the Basel II framework to introduce it formally) but took a U-turn starting in 2014 to make the calculation less flexible and more detailed.

In studying the framing of operational risk calculations, this paper contributes to two streams of research. My first contribution provides an inductive analysis of how risk calculations evolve. In this respect, four different sequential frames emerged from my analysis, depicting a phase-wise development of operational risk calculations: grounding principles, laying details, elaborating details and reducing details. While I do not claim that all risk calculations will follow this stage of development, my case provides two implications for accounting theory on risk calculations. First, activity focused calculations tend to fail in being useful and raise moral considerations of too tight control over the employees' self (Argyris & Kaplan, 1994; Malmi, 1997; McCabe, 2014; Shields, 1995; Vaughan, 1999; Willmott, 1994). Second, how inaccurate calculations could still be used as a communication tool (Coombs, 2016; Millo & MacKenzie, 2009).

My second contribution provides an understanding of what conditions lead to a reduction in details or complexity of risk calculations of risk-based regulations. Considering recent debates about the complexity of regulation being harmful to the banking sector (Dewatripoint & Tirole, 2012; Haldane, 2012; Herring, 2016, 2018), my results provide important implications for the future of risk-based calculations in banking. I argue that instead of enhancing accountability, too simple and too complex calculations both become a conduit for non-transparency. Thus, risk-based calculations would need a balance point, if they have to become successful.

The rest of the paper is organized as follows. The next section problematizes calculations and presents a theoretical section on framing. The third section elaborates on methodology. The fourth section presents the result of the case. Finally, conclusion and discussion are presented.

Theory

Social Understanding of Risk Calculations and Framing

Calculations of risks allow assigning a kind of economic value to risks (McGoun, 1995; Power, 2004a, 2009). This economic value may not be completely objective and can contain subjective elements such as acceptance of the approach and its outcome by a group of actors (de Goede, 2004; Huber & Scheytt, 2013; Mikes, 2011). Like market calculations, risk calculations involve a number of actors and their subjective values (Callon & Muniesa, 2005; Mikes, 2009; Millo & MacKenzie, 2009). Despite counterclaims of inaccuracy and ineffectiveness (Danielsson, 2002; Danielsson, 2008; McGoun, 1993), the effectiveness of risk calculation could be attributed to the fact that these calculations make complicated calculations possible, and produce pragmatic solutions to problems that could not be solved by pure judgment (de Goede, 2004; Hansson, 2010; Szegö, 2002). As expressed by Millo &

MacKenzie (2009) even inaccurate calculations of risks have provided communicative qualities leading to their organizational usefulness. Similar views on calculation have been expressed by Coombs (2016) who proposes that simplified calculations of complex realities still produce a useful impact on organizations in aligning the behavior of their employees to desired goals.

The calculation is such a ubiquitous term that it needs no introduction. But sociologists like Callon & Muniesa (2005), Callon & Law (2005) and Cochoy (2008) question the established notions of calculation by rebuking the distinction between technical approaches of detailed calculations and actants in the actor worlds (Callon, 1998a; Muniesa, Millo, & Callon, 2007). As observed by Callon & Law (2005) – “[C]alculation and noncalculation reside not primarily within human subjects but in material arrangements, systems of measurement, and methods of displacement or their absence.” The reason for rebuking this distinction is – calculations allow a certain degree of decision making by agents and their impact on decision making of agents cannot be separated from the personal value of the agent as well as the actor-network context in which the agent is embedded (Callon, 1998b; Granovetter, 1985). Thus, these scholars look at assemblages of how technical calculations are carried out by agents without separating the technical calculation from the political actors.

This look at calculations allows taking into account the notion of judgments as a way of calculation (Callon & Muniesa, 2005). Again, judgments allow actors in taking action. There are two reasons for including judgments under the boundary of calculations. First, while theorizations about rational actors have produced a view that actors calculate, several ethnographic studies have shown that actors use judgments and later qualify those judgments with detailed calculation, if possible (Callon & Law, 2005; Callon & Muniesa, 2005; Cochoy, 2008). Consequently, there is no decipherable separation between judgment and calculations, but a continuum of different possibilities combining both the approaches (Callon & Law, 2005). Second, the expanded view on calculation, as well as non-isolated look at calculations, allows a better understanding of reconstruction of calculations since complex calculation approaches are preceded by simple approaches and simple ones by the human desire to make their intuitive and judgmental process calculable (Callon & Muniesa, 2005; Power, 2004b).

Framing in Goffman’s language means “bracketing” of ideas (Callon, 1998b; Vinnari & Skærbæk, 2014). Vollmer (2007) takes this idea of framing and applies it to calculations saying that calculations have a meaning associated with their social use and thus in their use, calculations are framed in a particular way. Benford & Snow (2000) define frames as schemes of interpretation. The frames of interpretation are socially constructed and comprise both individual’s cognitive ideas as well as existing social structures (Roussy & Brivot, 2016). In summary, frames allow meaning to be associated with

calculations (Vollmer, 2007). To understand the meaning in a context Benford & Snow (2000) argue to look at motivation as well as a diagnosis (as to how a specific “problem” is defined). Consequently, following Benford & Snow (2000) I focus on understanding the motivations of the actors as well as how actors define the operational risk in my empirical analysis.

Methodology

Case selection

A qualitative exploratory documental analysis was carried out to address the identified research question. The investigation was predominantly inductive in nature, where empirical understandings allowed informing theoretical constructs. The selection of operational risk calculations is due to two unique empirical reasons. First, operational risk calculation, as a concept, is closer to the activity based calculations and understanding in organizations (Arena et al., 2017; Mikes, 2011). Second, operational risk calculations represent a unique case where the BCBS first started pushing for activity focused calculations around 2001, but took a U-turn starting in 2014 to make the calculation less activity focused. This U-turn was uniquely applied to the operational risk calculations whereas other major activity focused risks such as credit risk, saw a continuation of the activity focused calculations approach (cf. Baud and Chiapello, 2016). This U-turn provided a unique opportunity to understand reasons and counter reasons for promoting the notions on distances of risk calculations from actual organizational activities.

Data collection

Ease of accessibility and verification has made a study based on standards and lobbying comment letters as the main focus of empirical research in accounting standard setting (Georgiou, 2010; Puro, 1984; Reuter & Messner, 2015; Sutton, 1984; Watts & Zimmerman, 1978; Weetman, Davie, & Collins, 1996). Though such research is restricted to overt, public or observable kind of lobbying, yet it is considered useful for research in understanding arguments of lobbyists (Reuter & Messner, 2015; Weetman et al., 1996; Young, 2014). Consequently, the primary data sources for this study are the documents of the BCBS and the responses from the practitioners on operational risk. Since the focus of the study was on operational risk, the paper focused on all the relevant documents of the BCBS and available public responses from the lobbyists (banking associations, consultants, and banks) that were published during the years 1980 and 2016. In total, 652 archival documents were studied (See Table 1). The year 1980 was selected because this was the year indicated in several research papers when operational risk started gaining traction (cf. Power, 2007). The lobbying responses from 2010-2016

were downloaded from the Basel Committee website since before 2010; the committee did not publish the responses or reasons for acceptance of suggestions.

INSERT TABLE 1 ABOUT HERE

Data analysis

Before analysis of the data was carried out, all data sources were arranged historically. Afterward, specific sections focusing on the calculations of operational risk were identified for both the actor groups. The identified sections were then inductively analyzed to find important historical milestones and create a phase-wise historical story on operational risk calculations (Erb & Pelger, 2015; Pelger, 2016).

The first level of analysis focused on analyzing the viewpoints of the BCBS and the practitioners separately. Primarily three types of analyses were performed here. The first type of analysis relied on understanding detailed steps of operational risk calculations. The second type of analysis was on understanding how the actors argued in favor of their approaches of calculations. The third type of analysis was performed to understand the historical changes of the operational risk calculations of different actors.

The second level of analysis focused on the differences and similarities between the views of the BCBS and the lobbyists in different historical phases. The time-bound views of both the actor groups on operational risk calculations were juxtaposed to each other to find the differences in their understanding of the operational risk calculations. There were similarities that both the actors promoted operational risk calculations to get a tangible understanding of what it is since the operational risk was neither in vogue among standard setters nor the practitioners before. However, there were differences in the sense that the BCBS was a driving force towards the detailed steps of operational risk calculations until 2014 when it changed its instance to make it less detailed whereas the lobbyists were always focused on less detailed calculations of operational risk.

Case results

The deregulation started through the Basel accord of 1988, in response to the manipulative behavior of bankers and several banking frauds, has resulted in the inclusion of many risk calculations inside the

regulatory perimeter. Also, detailed calculation steps were imposed for many risks calculations (for details on credit risk see Baud and Chiapello (2016), for operational risk see Power (2007)) in subsequent publications of the BCBS starting 1988. However, the detailed calculation steps concerning operational risk witnessed a U-turn from the BCBS starting 2014. This U-turn culminated in a consultative document, published on 3 June 2016, where the BCBS formally proposed withdrawal of the most detailed calculation of the operational risk termed as the Advanced Measurement Approach (AMA). The proposal of withdrawal of the AMA was accompanied with the elaboration of the details of the Standardized Measurement Approach (SA). This case elaborates on these developments on operational risk to explore how the BCBS and the lobbyists contributed to the final reduction in details of operational risk calculations. In so doing, the paper develops the four distinct historical phases of operational risk calculations.

Development of operational risk calculations

Framing the broad principle of operational risk calculation (1980-2000)

The BCBS overtures

This era of operational risk starts with no focus on operational risk calculations in the 1980s and ends with its gradual ascension to the throne by the late 1990s (Power, 2007). The famous Basel accord of 1988 by the BCBS does not mention operational risk even once. As highlighted by several scholars, the credit for the first formal identification of operational risk by any standard setter goes to the 1991 integrated control framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Some experts also point to two essential landmark events that contributed to the rise of operational risk in the banking domain. First, the famous Bearing Bank failure and its chief orchestrator - the rogue trader Nicholas Lesson brought operational risk to the attention of the banking standard setters in 1995. Second, the 1996 landmark direction of the BCBS on self-regulation by internal models to manage market risk paved the way for the development of internal calculation of other risk categories (Power, 2007).

As a result of the several important events mentioned above, the end of the decade of the 1990s saw a sharp rise in discussions on operational risk. Consequently, in 1998 the BCBS started identifying a conceptual approach to operational risk calculations. The document was based on the qualitative practice survey of thirty significant banks. The document laid the discussion for the calculation in a specific section comprising five paragraphs. The document specifically raised three important operational failures to position importance of operational risk calculations – a) failure of internal control b) unethical behavior of employees and c) failure of technology. In this document, the BCBS

laid out the meta-principle for operational risk calculations. The details of the calculation were not identified. First, the document laid out the meta-principle of the level of calculation of the operational risk (the bank or a business unit). Then the steps of calculation were laid out. These involved identifying the external (failure of external dealings with other parties) as well as internal failures (failure of internal control and corporate governance, failure of the IT system) of operations that contributed to operational risk. Several attributes of the identified failures were also suggested to be recorded at a meta-level in this document:

- a) Measuring and collecting the size and frequency of losses linking them to factors
- b) Categorizing losses based on factors
- c) Estimating the probability of a categorized operational loss event and the potential size of the loss
- d) Using historical internal loss experience in estimating probabilities
- e) Supplement internal data with external data from other banks
- f) Get inspired by the insurance business

The document of 1998 also proposed the idea of linking the calculations to the capital charge (allocating capital according to the calculated risk level) and stressed the need to identify more advanced techniques for allocating capital concerning operational risk. However, the document did not propose detailed steps for calculating such capital charge. The idea of a capital charge and its link to the calculations were elaborated in further documents and communication of the BCBS. In June 1999, in the amendment to the Basel accord of 1988, the Basel Committee formally proposed the idea of coming up with a capital charge for the operational risk (again without the details).

The idea of identifying external factors of failure (such as failure of external dealings with other parties) could be traced developing in other parallel thread of documents on foreign transaction settlement starting in 1984. Here, imperative to note is the fact that the settlement of foreign transactions was the most operationally problematic segment identified by the practitioners. Since these transactions involved cross-country transactions, it was spotted by the bankers as well as the BCBS, who were less bothered about other operational problems, especially the internal operational problems within banks. In the guideline consultation of September 2000 on foreign exchange transaction management and its finalization in December 2000, the BCBS proposed the identification and calculation of external losses. This calculation was similar to the steps for calculation highlighted in the 1998- calculation of the amount and the frequency of operational losses concerning different types of failure of foreign exchange transactions.

Disparate practices

Operational risk was not a popular verbatim among banking practitioners at the beginning of 1980's until 1990's. While standard setters picked up the issue at the end of the decade by looking into the banking frauds and failures that shocked the financial markets, practitioners did follow their footprints as well. For example, the Risk Waters group started publishing a weekly newsletter on operational risk in 2000. By 2001, operational risk has started emerging as a popular talk among practitioners. Conferences such as managing operational risk and latest developments in achieving operations, settlement and payment efficiencies had been organized by the Annual Global Financial Industry Forum sponsored by the Ernst and Young (Power, 2007).

The 1998 document on operational risk of the BCBS also puts light on the practitioner approaches to operational risk calculations. At this time, banks have been following a disparate set of operational risk calculations. While some banks had experimental approaches on the level (mostly business unit level) and steps of calculations, others had not even taken the first step of finding a relevant level for calculation of operational risk. Thus, some banks had identified internal factors such as internal audit ratings, volume, turnover, error rates, and income volatility to rate risk factors business unit wise. Some others had more detailed calculation steps and factors such as high-frequency, low loss amount and low-frequency high loss amount. Some of these banks with the idea of frequency and loss amount had also started collecting historical data. Some banks also had external loss event recorded and categorized for steps of calculations. Since very few banks had the reliable and sizable amount of data, qualitative rather than the quantitative use of calculations was popular. The calculations were mostly used for performance appraisal of units and managers rather than allocating capital charges for the losses.

Laying the foundation for a detailed approach to operational risk calculation (2001 – 2003)

First detailed approach from the BCBS

This era represents a concrete foundation and elaboration on the principles identified in the previous era with the proposal of three operational risk calculation approaches of increasing details. The era starts with the January 2001 consultative document from the BCBS that elaborated on the operational risk calculations in detail for the first time. This was followed by a report on regulatory treatment in September 2001 and a further consultation on management and supervision of operational risk in December 2001. In the Jan 2001 document, the committee introduced and developed the three separate approaches of increasing details to measure operational risk. The details of an approach were linked to both the level of calculation and the steps of calculation. The first approach of the basic

indicator (BI) approach was a simple approach allowed for all banks that allowed calculation of operational risk on the organizational level. The second approach called the standard approach (TSA) allowed calculation of operational risks at the business unit level based on business unit specific indicators. The third approach was the advanced approach (AMA) which was an advanced calculation approach incorporating elements of probability theory and required banks to collect data to find out expected loss and loss given default but allowed supervisors to fix unexpected loss for the calculation of operational risk. There was another version of the advanced approach proposed, commonly known as the loss distribution approach, which allowed even more flexibility to banks in calculating their unexpected loss level, and link to a capital charge for all the three approaches was discussed in detail in these documents (see table 2 below for details).

INSERT TABLE 2 ABOUT HERE

This document of 2001 set the modern foundation of three operational risk calculation approaches containing different details of the level and steps of calculation. The idea of linking operational risk calculation to capital charge was not yet fully developed and discussed. This document utilized two important arguments for enhancing the details of the level and steps of operational risk calculations. First, evolving technology and growing complexity of banking operations and products (such as securitization). Second, the BCBS approach to abandon its broad-brush approach of capital charge calculation in favor of more bank-specific capital charges (promoting its 1996 landmark view on self-regulation and internal calculation by banks).

Several advancements on the proposed framework of January 2001 were carried out by the BCBS in September 2001 document titled “Advancement in the Working Paper on the Regulatory Treatment of Operational Risk” (See table 3). The document of 2001 emphasized the review of operational risk calculations by citing increasing operational risk and decreasing market and credit risk of banks due to several factors:

“use of more highly automated technology, the growth of e-commerce, large-scale mergers and acquisitions that test the viability of newly integrated systems, the emergence of banks as very large-volume service providers, the increased prevalence of outsourcing and the greater use of financing techniques.”

The September 2001 document elaborated on the steps of all the three calculation approaches by recalibrating the factors used for calculation. For the BI approach, it recalibrated the factor indicator to 17-20%. For the TSA approach, it unified the indicators to gross income and recalibrated the individual factors used in the steps of calculation. For the AMA approach, it set 75% of the TSA as the

minimum capital charge. It was also visible in the communique of the BCBS that they need to collect more data for understanding operational risk and further laying down exact calculation steps by calibrating the factors using this data. In this regard, the BCBS launched two data collection exercises during 2001 and 2002.

December 2001 consultation document focused on recognizing the need for internal as well as external validation of models by banks for their internal calculation approaches of operational risk. By the year 2002, AMA approaches, and their use within organizations has begun to assume importance in the eyes of the BCBS. Data collection exercises, availability of data and banks' interest in taking up operational risk calculations for pricing purposes has catapulted AMA at the forefront of the BCBS agenda. In the consultative guideline document of July 2002 (which was finalized in Feb 2003), the BCBS further elaborated on the steps of calculation, especially the loss types used in the AMA (see table 3 for details). The consultations of December 2001, July 2002 and their finalization in February 2003 used arguments of technology, e-commerce, outsourcing, large volumes and mergers leading to enhanced operational risk exposure of banks.

INSERT TABLE 3 ABOUT HERE

Forced rethinking through standards with widespread skepticism from practitioners on advanced approaches

While the disparate practices of the previous era (1988-2000) prompted the BCBS to find common ground and introduce three approaches of increasing details, the practitioners saw this as the encroachment of the BCBS in the strategy of the banks. Right after the publication of the January 2001 foundational document of the BCBS, practitioners lobbied to question the capital charge proposed by the BCBS (regulatory capital charge of 20% on operational risk proposed by the BCBS). The practitioners questioned the credibility of the 20% figure by raising doubts on three important counts. First, the practitioners argued that the 20 percent figure overstates the amount of regulatory capital necessary to provide adequate coverage of banks, operational risk exposures. Second, the practitioners questioned the small sample of firms used to generate the 20% figure of capital charge. Finally, the practitioners warned that the 20% figure on the capital charge of operational risk along with the revised capital treatment for credit risk as taxing and burdensome for banks.

The 2002-loss data survey of the banks by the BCBS revealed some disparities in calculation practices. For example, only one-third of the banks were estimating operational losses and only half of those estimating operational losses were using it for pricing purposes. While many banks understood the

importance of operational risk, they were not willing to devise a full-fledged program on measuring it. This non-interest from banks on operational risk calculations is also indicated in the 2003 guideline on operational risk by the BCBS where it highlighted the emergence of separate structures for oversight of the operational risk among banks but little response on employing AMA.

Elaborating the details of calculation approaches (2003 -2014)

Muddying of water by the BCBS

This era starts in 2003 when the BCBS started making its calculation approaches better calibrated and even more detailed through several data collection and consultation exercises. The era ends with the BCBS's growing frustration in taming details and non-convergence of practices at banks¹. While the previous era ended with some more concrete levels and steps of calculation, the tentative details needed adjustments, especially concerning the diversifying banking businesses and complex subsidiary arrangements. The April 2003² consultation document proposed a reduction in the gross income indicator for the basic approach to 15%.

Furthermore, the calculation now proposed to take into account three-year average data on gross income (excluding zero or less than zero gross income). In a similar vein, changes were suggested in the TSA approach in the calculation factor indicator for the different business unit. Furthermore, an alternative standardized approach (ASA) for the Retail and commercial banking business unit was proposed where gross income indicator of the calculation could be replaced by $(m=0.035)$ multiplied by total loan and advances. The TSA approach also witnessed details in the level of calculation element by the inclusion of agency services as a separate business unit. The AMA approach underwent an even more radical transformation of details in its level and steps of calculations. The loss types (detachment element) were further elaborated to three levels in this document enhancing the details of calculations further for the AMA (for details see fig 1 and table 4). Also, detailed guidelines on unexpected loss calculation along with a proposed cap of 20% reduction from insurance mitigation of operational risk were provided. In the document, the BCBS clarified on the use of expected loss and unexpected loss elements to be accounted for in the AMA calculation steps.

“regulatory capital requirement as the sum of expected loss (EL) and unexpected loss (UL), unless the bank can demonstrate that it is adequately capturing EL in its internal business practices. That is, to base the minimum regulatory capital requirement on UL alone, the bank must be able to demonstrate to the

¹ These issues were continuously raised in the practice survey and data collection exercises of 2002, 2003, 2009, and implementation study of 2013

² The landmark consultation of April 2003 was followed by two further consultations in June 2004 and Nov 2005 and was finalized in June 2006. These documents did not present significant amendment to the operational risk calculation.

satisfaction of its national supervisor that it has measured and accounted for its EL exposure.”

In a guideline document of January 2004³, the BCBS enhanced the details of calculation step of AMA by allowing hybrid modeling for internationally active banks having several subsidiaries. The BCBS cited the balance between its two objectives of ensuring reasonable capital adequacy and flexibility provided to banks. The BCBS provided flexibility to the diversified banks to have the reasonable approach of operational risk calculations (AMA or other TSA or BI approaches) at the “significant” individual subsidiary level subject to home and host supervisory approvals. However, awareness and management of operational risk among senior management at a subsidiary level were made mandatory. This principle was justified by citing impediments to free transfer of cash in stressed conditions. While internationally active banks were recommended to show the group level AMA to its home supervisors, individual subsidiary level AMA was within the purview of the local supervisors. The principle recommended was that at least for significant subsidiaries, there should be separate calculations.

Moreover, in the same document, the BCBS allowed supervisors to grant sharing of resources and adjustment of data for individual small and medium subsidiaries where lack of data on operational losses made AMA modeling difficult. Sharing of resources meant that banks could have group level modeling teams for all subsidiaries. Adjustment of data meant that in case small and medium subsidiaries had an insufficient amount of data for modeling; they could use relevant adjusted data from the group level to supplement it. Both these situations allowed by the BCBS were to consider the cost-benefit considerations raised by the practitioners in its consultation.

In the backdrop, August 2003 also marks the start of more interest of the BCBS in operational risk transfer within subsidiaries of banks and mitigation by captive insurance mechanisms. After 2003, the BCBS undertook several studies in understanding the risk transfer mechanisms and their impact on the calculation of operational risk. These studies culminated in a 2009 consultation and subsequent finalization in 2010 when the BCBS finally elaborated on how to use insurance mitigation properly. In the document, the BCBS clarified on the insurance mitigation modelling by proposing many scenarios of use (such as treatment at the company level, at the business unit level, overall loss type level, at loss event level, using external data from other banks on same insurers to find insurers willingness to pay etc.). Finally, it concluded in favor of the most detailed level possible calculation step for AMA.

³ There were further consultation in Feb 2007 and finalization in Nov 2007. However, these consultations did not affect the calculation details or the guideline significantly.

In a further attempt to refine the AMA in 2010, detailed definition of the calculation elements on AMA methodology was proposed taking into account a lot of nuances. Consequently, gross loss, gross loss vs. internal loss, loss data thresholds, date of internal loss, grouped losses, and use of four data elements – internal loss data, external data, scenario analysis, and business environment and internal control factors were proposed. Also, details of calculation step of AMA on calculation, distribution assumption and calculation of loss size and severity were further elaborated.

INSERT TABLE 4 ABOUT HERE

The advances in calculations in this era were also matched with qualitative understanding on improving operational risk management and mitigation as well. For example, Outsourcing problems in the financial industry of back office and IT work was creating new avenues of operational risk. To tackle this issue, the BCBS started a consultation in August 2004 and issued a final guideline in Feb 2005.

“Outsourcing has the potential to transfer risk, management, and compliance to third parties who may not be regulated, and who may operate offshore.” (Aug 2004, Feb 2005)

These documents tried to identify qualitatively the impact of such activities on operational risk rather than elaborating on its calculations. These documents imposed seven requirements for the banks, viz., policy framework on finding which services to outsource, outsourcing risk management program, no problems to customers and regulators due to outsourcing, due diligence while selecting third parties, mandatory written contract, contingency plan, confidentiality of data. Also, two requirements for the regulators. Viz., awareness of potential risks of outsourcing and taking into account outsourced activities for supervision.

Business continuity was another concern for which the BCBS arranged a consultation in Dec 2005 and published its final report in Aug 2006. Again, these documents elaborated on the qualitative principles for creating operational resilience and business continuity in the face of adversity from the banks. These documents promoted business continuity principles for diversification and contingency plan by citing problems of concentration of IT infrastructure, concentrated financial districts, and connected economies prone to easy disruption by terrorist attacks or public distrust.

Persisting confusion and non-convergent approaches of practitioners

Despite the regulatory push, there was no convergence on calculations of operational risk. In fact, the interest of several banks on operational risk calculations was a result of enforcement by the standard setters and the regulators (Wahlström, 2006, 2009). There was a backlash from the practitioners on tying up of capital for yet another category of risk. Practitioners had shown a lukewarm response to the regulatory advances in operational risk calculations. This era was marked by the debate from the BCBS on expanding the details of AMA calculation by asking for entity-level AMA calculations for significant subsidiaries as well as group level AMA calculations for banks having multiple subsidiaries. The practitioners opposed this detail by citing two important reasons:

- a) Burdensome and costly to calculate and maintain separate databases for separate entities
- b) Insufficient data on small and medium subsidiaries on operational risk

The impact of these technical demands by the practitioners is observed in the further consultation of the BCBS where the subsequent documents allowed banks to use simple models for small units of internationally active banks. Moreover, the BCBS also allowed the sharing of infrastructure and supplementing appropriate data for small units of internationally active banks by external data to enhance samples of loss events.

U-turn on the complexity of operational risk calculations (2014 Onwards)

The BCBS says it - Let us change it

This era starts with the BCBS's frustration in taming details of calculations and non-convergence of banking practices⁴. The frustrations led to two important events – the BCBS proposed more details to the calculations of the standardized approach of operational risk in October 2014 and started hinting towards the withdrawal of the AMA calculations of operational risk in November 2014. In October 2014, a consultative document first elaborated on new details on the Business Indicator based on interest, service and financial component of business units (also allowing normalization of the business indicator in case of significant fluctuation of interest margins). Furthermore, a bucket wise calculation approach for enhancing the details of the calculation of operational risk to match nonlinear relationship between operational risk and indicator were proposed (See table 5 for details below).

This document cited several reasons for these change in the standardized measurement approach.

- A) The growing operational risk events as well as the severity of losses, but stable and falling capital requirements at banks were used to highlight the incorrect calibration of existing operational risk calculations

⁴ These issues were continuously raised in the practice survey and data collection exercises of 2002, 2003, 2009, and implementation study of 2013

“The Committee’s preliminary findings, based on the existing data, indicate that the current standardized framework comprising the BIA, TSA, and ASA is on average under calibrated, especially for large and complex banks, and that Advanced Measurement Approaches (AMA) capital charges are often benchmarked against this under calibrated capital requirement. Reflecting this concern, the revised Standardized Approach (SA) attempts to improve the calibration while addressing the weaknesses of the existing approaches identified above.”

“In addition, the changing operational risk profiles of banks may render a calibration based on the past behavior of variables unfit for the future.”

B) The BCBS professed towards continuous calibration of the operational risk models to ensure validity.

“Proxy-based indicators used in the operational risk approaches and the calibration of the associated parameters should, therefore, be periodically tested to ensure their continued validity. Such a review is all the more important given the lack of relevant operational risk data and experience in operational risk modeling when the original framework was designed in the early 2000s. We now have not only a richer data set to support the quantitative analysis, but also almost a decade of experience with implementation of the framework.”

C) Discrediting Gross Income as an indicator of operational risk where fall in gross income wrongly signals a reduction in operational risk.

“This assumption usually turns out to be invalid. In particular, where a bank experiences a decline in its GI due to systemic or bank-specific events including those involving operational risk losses, its operational risk capital falls when it should be increasing.”

D) Discrediting linear relationship between the gross income and operational risk assumed in the current Standardized models.

“Operational risk exposure increases with a bank’s size in a non-linear fashion.”

INSERT TABLE 5 ABOUT HERE

The idea to reduce details of the calculation was endorsed in a report to G20 submitted in Nov 2014. In the report, the BCBS iterated *“the non-convergence and diversity of approaches making supervision of operational risk complex and challenging for supervisors”* as an argument to support less detailed approaches of operational risk calculations. Furthermore, Mr. Stefan Ingves, Chairman of the BCBS and Governor of the Sveriges Riksbank, again hinted about their ongoing work on simplifying the calculation of the advanced operational risk calculation approach in the Eighth Meeting of the Regional Consultative Group for Europe in Berlin on 5 May 2015. He emphasized cost-benefit imbalance, failure to reduce variability in banking practices and complexity of the calculations leading to mixed supervisory experiences as three prime reasons that prompted the BCBS to start looking at the simplification of the operational risk calculation approach. He also hinted at the change in an instance by linking operational risk to people management, governance and culture instead of a data fitting exercise:

“In the end, operational risk measurement and management has less to do with fitting a distribution to a data set, and is more about managing people and processes, and more generally engraining the appropriate culture and risk governance within a bank.”

Again, in November 2015 at the Annual Convention of the Asociación de Mercados Financieros, in Madrid, Mr. Ingves drew a parallel between the failure of the Swedish Vasa ship and the Basel standards by applying the argument *“well-constructed but incorrectly proportioned.”* Here, he hinted at the reduction in details of the calculation of operational risk in the following words:

“Most would agree that the benefits of the Advanced Measurement Approaches are not proportionate to the related costs and complexity.”

On March 2016, the BCBS in a consultation document proposed officially to withdraw AMA calculations on operational risk and improve the details of the calculation step of standardized measurement approach further (For details see table 5 above). William Coen, the secretary general of the BCBS, reiterated the withdrawal of AMA on 5 April 2016 while talking at the Australian Financial Review's Banking and Wealth Summit in Sydney. He explicitly hinted at a concrete year-end proposal to remove AMA approach on operational risk by citing its cost-benefit imbalance, complexity, variability in capital calculations, and lack of comparability as the reasons for its abandonment.

The practitioner's scrutiny of the new approach

The practitioners were skeptical in general to the details of the TSA approach of the consultative document of 2014. Three criticisms repeatedly appear in the comment letters. First, the practitioners demanded transparency from the BCBS on the calibration exercise conducted by the BCBS. The issue of transparency was raised since the BCBS used “under-calibration of factors in the previous approach” as a reason for detailed calculation steps by introducing a new business indicator and bucket wise list of factors for calculation. Second, practitioners warned the BCBS on not including enough sensitivity to the size of the banks and their different business models in its detailed calculation steps (such as fee sensitive businesses being unfairly treated in the new indicator). Here again, practitioners demanded changes in the bucket approach of calculations proposed by the BCBS. Third, practitioners demanded similarity of terms used by the accounting bodies and the BCBS to reduce confusion on accounting terms used in the document. The impact of these demands by the practitioners is observed in the consultation of March 2016 where the BCBS published the details of the calibration exercise, added more details of the business indicator and bucket sizes to take into account different business models and approaches in banks.

Summary and Contribution of the Case

This paper set out to explore how the Basel Committee on Banking Supervision (BCBS) and the lobbyists contributed to the evolution of the details of operational risk calculations. In doing so, this case of operational risk calculation presents two important contributions. First, it looks at how the details of the operational risks evolved in the four phases where framing approaches were different. In the first phase of framing grounding principal, the problem with operational failure was the motivating factor for the development of understanding on operational risk. This motivation led to linking operational risk to the operations performed in the organizations. In this phase, regulators did not focus on the merit of the different approaches in use; rather they tried to map the common principles of calculation at banks acknowledging the diversity of practice regarding what was measured, how it was measured and what were the uses in the banks.

In the second phase of laying details, many details were added to the operational risk calculation, and the motivation of the BCBS was to bring convergence to the operational risk calculation practices. In this phase, three different models of operational risk of increasing closeness to activity were propounded and developed. The first approach of calculation at the bank level was the most distant approach from the activity which allowed calculation of operational risk at the bank level by linking it to the gross income. The second approach allowed calculation of operational risk at the business unit

level by linking it to business unit specific indicators of activity (gross income at the business unit level). The third approach of advanced measurements allowed linking operational risk to the activity. For example, the internal loss approach and the loss distribution approach introduced in 2001 required banks to collect data on the frequency of operational failures and amount of money lost. Later these approaches were elaborated to include classification of different types of operational failure related events. Similarly, the scorecard-based approach introduced in September 2001 for the first time allowed banks to evaluate their operational risks based on the drivers and controls of operational risk. Despite more elaborations from the BCBS, the BCBS loss data collection exercises reveal that banks continued to have divergent approaches of operational risk calculation.

In the third phase of elaborating details, more details were added to the operational risk calculations, but these calculation details did not affect the distance between the operational risk calculations and the activities. For example, advanced measurement approaches were fused with scenario analysis at the business unit level (September 2003). Clarifications on how to combine different approaches of operational risk calculation for multinational and holding bank companies were clarified.

The fourth phase of reducing details, represents an era where the BCBS gets frustrated with the non-convergence of operational risk calculation approaches of the banks and withdrew the advanced measurement approaches and elaborated on the standardized approach of the business unit level to propose an indicator that took into account the interest, service and financial component of the banking business. Thus, in this phase, I see a distancing of the operational risk from the activities of the operations.

My second contribution is related to the framing of a U-turn from the BCBS on the closeness of operational risk calculations to the activities. Here I find that the BCBS frames non-convergence of practices at banks as the prime reason for the change in an instance. This framing is further supported by highlighting the problems with the existing approaches of operational risk calculations: complexity, not well balanced, under calibration, and non-suitability of gross income as an indicator of operational risk.

While studying the framing of operational risk calculations, I accept some limitations of this study. Addition or removal of details in risk calculation has been suggested to evolve due to two pressures. First, regulator's desire to curb the problems post a crisis and second, the political intentions of the banks aimed at reducing cost of new implementations on additional details or benefitting by more free capital for business (diluting the efforts of the regulators in their favor) (Herring, 2016, 2018; Hunter, Kaufman, & Pomerleano, 2003; Turner, 2009). It is difficult to fully and directly explicate how the

political intentions of actors affect the regulator's course of action on risk calculations since the non-public and indirect form of lobbying may be difficult to trace and link to specific regulatory decisions on risk calculations. However, as suggested in the extant literature on regulation studies in accounting, studying publicly available document could still provide a good pointer on what kind of prominent points were raised by the banks that might have affected the regulator's course of action on risk calculations (Georgiou, 2010; Puro, 1984; Reuter & Messner, 2015; Sutton, 1984; Watts & Zimmerman, 1978; Weetman et al., 1996). Public lobbying based studies could also be justified because the regulation building is becoming more transparent where several actors are invited to participate in the due process of regulation building (Richardson, 2008; Richardson & Eberlein, 2011).

Discussion and Implications

This paper set out to explore how the Basel Committee on Banking Supervision (BCBS) and the lobbyists contributed to the development of the different calculations of operational risk. In doing so, this case of operational risk calculation presents several important implications and further research opportunities.

One possible direction of learning from the case is about understanding the historical development of calculation of errors (their magnitude and frequency) in operation as the operational risk. This paper traces four phases of development of operational risk calculations. In the first three phases, the calculations were pushed to the domain of the lowest level of activity in the organizations. Here, I find that like activity-based costing approach, the closeness of calculation to the activity engendered a lot of variation, leading to its eventual withdrawal. Furthermore, in line with learnings from the activity-based costing approaches (Argyris & Kaplan, 1994; Malmi, 1997; Shields, 1995), I also argue that activity-based accounting instruments of operational risk need to be closely examined on whether and how they promoted employees or organizations in not reporting the problems (Innes, Mitchell, & Sinclair, 2000). I hypothesize that such non-reporting could have rendered the calculations not useful and unsuitable for the purpose. In addition, I also argue that while this kind of calculation possibly could seem innocent, but it could also have deep reaching ethical considerations. For example, if it was implemented with honesty, it could tighten the control approaches and colonize the employee's self (McCabe, 2014; Vaughan, 1999; Willmott, 1994). Thus, I propose further ethical dimensions of such activity focused risk calculations to be further examined and investigated.

Another possible direction is to look for would be the use of inaccurate risk calculations (Coombs, 2016; Millo & MacKenzie, 2009). In this regard, this paper supports the argument propounded in the recent literature (Coombs, 2016; Millo & MacKenzie, 2009) on risk calculation that "definitions and data need not accurately represent financial practices to be useful." These works have shown that inaccurate

models are useful since they facilitate communication and prove useful in supporting decisions within organizations. While previous works have used the above statement to show the intra-organizational usefulness of inaccurate models, this paper hints towards the idea that inaccurate models could also facilitate inter-organizational communications and thus become useful and relevant in this aspect too. In my case, specifically, the inaccurate models of operational risk allowed regulators to gain structured input from the practitioners in subsequent stages that helped regulators and practitioners both in understanding the inaccuracy of the calculation approaches leading to its refinement. Despite the usefulness, two aspects also emerged that challenged the use of inaccurate models. First, when inaccurate models are coupled with flexible approaches allowing disparate and complexity of practices to coexist and thrive for too long, it could hamper their usefulness in “monitoring” by disallowing convergence of practices. Second, while simpler inaccurate models could be a useful facilitator of communication between different organizations, complex inaccurate models could result in non-transparency. Consequently, I indicate that while there is always a need for continuous refinement of calculation approaches, the approaches should not be made complex lest they become detrimental. Thus, I encourage scholars in exploring further what has been missing in this piece of research, especially, how inaccurate risk models facilitate decision making in intra-organizational situations (e.g., monitoring and supervision of banks by the banking regulators).

Another possible direction of learning from the case could be about understanding what level of complexity is useful for risk-based calculations (Dewatripoint & Tirole, 2012; Haldane, 2012; Herring, 2016, 2018). As the last phase of framing suggests, the complex and detailed risk-based calculations failed to bring convergence to the practice of operational risk calculation and thus became a conduit for non-transparency. Whether the different approaches of risk calculations resulted in this failure along with the non-commercialization of the calculations of operational risk would need further investigation.

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Date	Document Title	Type	No of docs#
Feb 1984	Inter-bank confirmation procedures	O	0+1+1=2
Sep 1998	Operational Risk Management	O	0+1+1=2
Jul 1999	Supervisory Guidance for Managing Settlement Risk in Foreign Exchange Transactions	G(C)	0+1+1=2
Sep 2000	Supervisory Guidance for Managing Settlement Risk in Foreign Exchange Transactions	G(F)	0+1+1=2
Jan 2001	New Basel Accord	S(C)	259+0+4=263
Sep 2001	Working Paper on the Regulatory Treatment of Operational Risk	O	0+1+1=2
Dec 2001	Sound Practices for the Management and Supervision of Operational Risk	G(C)	0+1+1=3
Jul 2002	Sound Practices for the Management and Supervision of Operational Risk	G(C)	0+1+1=2
Feb 2003	Sound Practices for the Management and Supervision of Operational Risk	G(F)	0+1+1=2
Mar 2003	The 2002 Loss Data Collection Exercise for Operational Risk: Summary of the Data Collected	O	0+1+1=2
Apr/Jul 2003	The New Basel Capital Accord	S(C)	187+0+1=188
Aug 2003	Operational risk transfer across financial sectors	O	0+1+1=2
Jan 2004	Principles for the home host recognition of AMA operational risk capital	G(F)	0+1+1=2
Jun 2004	International Convergence of Capital Measurement and Capital Standards	S(C)	0+0+1=1
Aug 2004	Outsourcing in Financial Services	G(C)	0+1+1=2
Feb 2005	Outsourcing in Financial Services	G(F)	0+1+1=2
Nov 2005	International Convergence of Capital Measurement and Capital Standards	S(C)	0+0+1=1
Nov 2005	The treatment of expected losses by banks using the AMA under the Basel II Framework	O	0+1+1=2
Dec 2005	High-level principles for business continuity	G(C)	1*+1+1=3
Jun 2006	International Convergence of Capital Measurement and Capital Standards	G(F)	0+0+1=1
Aug 2006	High-level principles for business continuity	G(F)	0+1+1=2
Oct 2006	Observed range of practice in key elements of Advanced Measurement Approaches	SP	0+1+1=2
Feb 2007	Principles for home-host supervisory cooperation and allocation mechanisms in the context of Advanced Measurement Approaches (AMA)	G(C)	0+1+1=2
Nov 2007	Principles for home-host supervisory cooperation and allocation mechanisms in the context of Advanced Measurement Approaches (AMA)	G(F)	0+1+1=2
July 2009	2008 Loss Data Collection + advanced operational risk measurement practice	SP	0+1+2=3
Oct 2010	Recognizing the risk-mitigating impact of insurance in operational risk modelling	G(F)	0+1+1=2
Dec 2010	Operational Risk – Supervisory Guidelines for the Advanced Measurement Approaches	G(C)	20+1+1=22
Dec 2010	Sound Practices for the Management and Supervision of Operational Risk	G(C)	25+1+1=27
Jun 2011	Operational Risk – Supervisory Guidelines for the Advanced Measurement Approaches	G(F)	0+1+1=2
Jun 2011	Principles for the Sound Management of Operational Risk	G(F)	0+1+1=2
Jun 2012	Principles for effective risk data aggregation and risk reporting	G(C)	10+1+1=12
Jan 2013	Principles for effective risk data aggregation and risk reporting	G(F)	0+1+1=2
Dec 2013	Progress in adopting the principles for effective risk data aggregation and risk reporting	I	0+1+1=2
Oct 2014	Review of the Principles for the Sound Management of Operational Risk	SP	0+1+1=2
Oct 2014	Operational risk –Revisions to the simpler approaches	S(C)	48+1+1=50
Nov 2014	Reducing excessive variability in banks' regulatory capital ratios	R	0+1+1=2
Mar 2016	Standardized Measurement Approach for operational risk	S(C)	0+1+1=2
Mar 2016	Pillar 3 disclosure requirements – consolidated and enhanced framework	S(C)	26+1+1=28
Total Documents		=	652

Table 1: Document details

* Overview only

#No. of Responses + News items + Documents=Total

G – Guideline, SP- Standard Practice, O - Other, (c) – Consultation, S – Standard, R – Report to G20, I – Implementation, (F) - Final

Elements	Basic Approach	Standard Approach	Advanced Approach*
Level of calculations	Bank	Business Units (Corporate Finance - CF, Trading and Sales - TS, Retail Banking -RB, Commercial Banking -CB, Payment, and Settlement -PS, Retail Brokerage -RBR, Asset Management- AM);	Business Units (recommended to be same as the standard approach); A reasonable number of non-overlapping and comprehensive loss types based on the industry’s best current understanding of loss events along with loss amount; Within each business line/loss type combination, the supervisor specifies an exposure indicator (EI) which is a proxy for the size (or amount of risk) of each business lines’ operational risk exposure.
Steps of Calculation	Indicator: Gross Income Capital charge is calculated by multiplying Gross Income by a factor (provisional estimate of the factor is set around 30%. The committee elaborated that these calculations were matched with standardized sample calculation of 20% of total regulatory capital for operational risk)	Indicators (Gross Income for CF, TS, and RBR, Annual Average Assets for RB and CB, Annual settlement throughput for PS and total funds under management for AM); Provisional Weights for Business Units for calculating the factor multiplier – (CF- 8-12%, TS – 15-23%, RB – 17-25%, CB – 13-20%, PS – 12-18%, RBR – 6-9%, AM – 8-12%) Within each business unit, the capital charge is calculated by multiplying the respective indicator by a factor (provisional steps to estimate the factor for each business unit = 20% of total regulatory capital X weight of the business unit/Indicator of the business unit)	Banks measure, based on their internal loss data, a parameter representing the probability of loss event (PE) as well as a parameter representing the loss given that event (LGE). For each business, line/loss type calculate Expected Loss (EL). = EI*PE*LGE Required capital = $\sum_i \sum_j [\gamma (i,j) * EI(i,j) * PE(i,j) * LGE(i,j)]$ (i is the business line, and j is the risk type.) Y (Gamma) - To facilitate the process of supervisory validation, banks supply their supervisors with the individual components of the expected loss calculation (i.e., EI, PE, LGE) instead of just the product EL. Based on this information, supervisors calculate EL and then adjust for unexpected loss through the gamma term to achieve the desired soundness standard.
Link to the capital charge	Calculations were linked to the capital charge for the operational risk. Consequently, explicit capital charge for operational risk was developed in these communiques. Since utilizing an approach that is more detailed allowed banks to reduce their capital charge for operational risk, the committee proposed the principal of floor to make sure that capital charge cannot be less than the floor.		

Table 2: January 2001 document on Operational risk measurement

* Under the Loss Distribution Approach, the bank estimates, for each business line/risk type cell, the probability distribution functions of the single event impact and the event frequency for the next (one) year using its internal data, and computes the probability distribution function of the cumulative operational loss. The capital charge is based on the simple sum of the operational risk VaR for each business line/risk type cell. Correlation effects across the cells are not considered in this approach. The loss distribution approach has the potential advantages of increased risk sensitivity. This method differs from the Internal Measurement Approach in two important respects. It aims to assess unexpected losses directly and not via an assumption about the relationship between expected loss and unexpected loss, and the bank itself determines the structure of business lines and risk types. There is no need for the supervisor to determine a multiplication (gamma) factor under this approach.

Documents	Changes in BA	Changes in TSA	Changes in AMA
Jan 2001 Consultation*	See table 2	See table 2	See table 2
Sep 2001 Working Paper	<p>Steps of Calculation: The gross income factor was reduced to 17-20%</p>	<p>Steps of Calculation:</p> <ol style="list-style-type: none"> 1. Indicators for all business units were unified to Gross Income. 2. weight of the total regulatory capital in capital charge was changed from 20% to 12 % 	<p>Link to Capital charge: Floor was set to 75% of the capital requirement under the Standardized Approach resulting in at least a 9% capital charge.</p> <p>Introduction of a scorecard approach#</p>
Dec 2001 Consultation		<p>Steps of Calculation: elaborated on the need for principles of internal as well as external validation of approaches</p>	<p>Steps of Calculation: elaborated on the need for principles of internal as well as external validation of approaches</p>
July 2002 Consultation and Feb 2003 Finalization			<p>Steps of Calculation: First-time enumeration of loss categories (Internal Fraud; External Fraud; Employment Practices and Workplace Safety; Clients products and business practices; Damage to physical assets; Business disruption and system failure; Execution delivery and process management)</p>

Table 3: Laying the foundation of the detailed approach to operational risk measurement

In this approach, banks determine an initial level of operational risk capital at the firm or business line level and then modify these amounts over time by a scorecard that attempts to capture the underlying risk profile and risk control environment of the various business lines. These scorecards are intended to bring a forward-looking component to the capital calculations, that is, to reflect improvements in the risk control environment that will reduce both the frequency and severity of future operational risk losses. The scorecards may be based on actual measures of risk, but more usually identify some indicators as proxies for particular risk types within business units/lines. Line personnel will normally complete the scorecard at regular intervals, often annually, and subject to review by a central risk function.

* Consultations of Jan 2001, Apr 2003, Jun 2004 and Nov 2005 were finalized in Jun 2006

Documents	Changes in BA	Changes in TSA	Changes in AMA
<p>April 2003* Consultation</p>	<p>Steps of Calculation: a) The gross income factor was reduced to 15 % b) Average of past three years as the capital charge instead of one year</p>	<p>Level of Calculation: a) agency services (AS) the eighth business unit for calculation (though it was in the annex in Jan 2001 document but wasn't used for calculation) Steps of Calculation: a) capital charge is calculated on three-year basis b) Units for calculating the factor multiplier – (CF- 18%, TS – 18%, RB – 12%, CB – 15%, PS –18%, AS – 15%, RBR – 12%, AM –12%) c) Alternative standardized approach (ASA) introduced where Gross Income indicator for RB CB could be replaced by a factor “m=0.035” multiplied by loan and advances</p>	<p>Steps of Calculation: a) Three levels of details for the seven introduced loss types b) More freedom to banks. Only guidelines - A bank's AMA will also be subject to a period of initial monitoring by its supervisor before it can be used for regulatory purposes. This period will allow the supervisor to determine whether the approach is credible and appropriate. A bank's internal measurement system must reasonably estimate unexpected losses based on the combined use of internal and relevant external loss data, scenario analysis and bank-specific business environment and internal control factors. The bank's measurement system must also be capable of supporting an allocation of economic capital for operational risk across business lines in a manner that creates incentives to improve business line operational risk management. b) Recognizing the risk mitigating impact of insurance in the measures of operational risk used for regulatory minimum capital requirements subject to details and supervisory approval. The recognition of insurance mitigation will be limited to 20% of the total operational risk capital charge. c) Regulatory capital requirement as the sum of expected loss (EL) and unexpected loss (UL), unless the bank can demonstrate that it is adequately capturing EL in its internal business practices. That is, to base the minimum regulatory capital requirement on UL alone, the bank must be able to demonstrate to the satisfaction of its national supervisor that it has measured and accounted for its EL exposure.</p>
<p>Jan 2004 Finalization</p>			<p>Steps of Calculation: a) hybrid approaches of measurement allowed b) Calculate AMA for group (allocation for small subsidiaries) as well as significant individual subsidiaries (subject to supervisory approval) b) Adjustment of small and medium subsidiaries loss event and size data by group level data in case the amount of data available is insignificant</p>
<p>Late 2009 Consultation Oct 2010 Finalization</p>			<p>Steps of Calculation: Clarification on the use of insurance to reduce the capital charge for operational risk, insurance mitigation modeling required to be very detailed</p>
<p>Dec 2010 – Consultation June 2011 Finalization</p>			<p>Steps of Calculation: Details on AMA elements – Gross loss, gross loss vs. internal loss, loss data thresholds, date of internal loss, grouped losses, Use of four data elements – internal loss data, external data, scenario analysis, and business environment and internal control factors Steps of Calculation: details of calculation, distribution assumption and calculation of loss size and severity,</p>

Table 4: Elaborating the details of approaches

* Consultations of Jan 2001, Apr 2003, Jun 2004 and Nov 2005 were finalized in Jun 2006

Documents	Changes in BA	Changes in TSA	Changes in AMA
Oct 2014 Consultation	None	<p>Steps of Calculation: Indicators: Gross Income replaced by a sophisticated Business Indicator based on interest, service and financial component of business units (Allowed normalization of the business indicator in case of significant fluctuation of interest margins)</p> <p>Factors: Bucket wise factors introduced</p>	None:
Mar 2016 Consultation		<p>Steps of Calculation: Indicators: details of the sophisticated Business Indicator based on interest, service and financial component of business units enhanced (Allowed normalization of the business indicator in case of significant fluctuation of interest margins)</p> <p>Factors: Bucket wise factors refined</p>	Proposed Withdrawal

Table 5: Enhancing the standardized approach and withdrawing the advanced approach

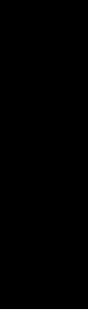
Event-Type Category (Level 1)	Definition	Categories (Level 2)	Activity Examples (Level 3)
Internal fraud	Losses due to acts of a type intended to defraud, misappropriate property or circumvent regulations, the law or company policy, excluding diversity/ discrimination events, which involves at least one internal party.	Unauthorised Activity	Transactions not reported (intentional) Trans type unauthorised (w/monetary loss) Mismarking of position (intentional)
		Theft and Fraud	Fraud / credit fraud / worthless deposits Theft / extortion / embezzlement / robbery Misappropriation of assets Malicious destruction of assets Forgery Check kiting Smuggling Account take-over / impersonation / etc. Tax non-compliance / evasion (wilful) Bribes / kickbacks Insider trading (not on firm's account)
External fraud	Losses due to acts of a type intended to defraud, misappropriate property or circumvent the law, by a third party	Theft and Fraud	Theft/Robbery Forgery Check kiting
		Systems Security	Hacking damage Theft of information (w/monetary loss)
Employment Practices and Workplace Safety	Losses arising from acts inconsistent with employment, health or safety laws or agreements, from payment of personal injury claims, or from diversity / discrimination events	Employee Relations	Compensation, benefit, termination issues Organised labour activity
		Safe Environment	General liability (slip and fall, etc.) Employee health & safety rules events Workers compensation
		Diversity & Discrimination	All discrimination types

Event-Type Category (Level 1)	Definition	Categories (Level 2)	Activity Examples (Level 3)
Clients, Products & Business Practices	Losses arising from an unintentional or negligent failure to meet a professional obligation to specific clients (including fiduciary and suitability requirements), or from the nature or design of a product.	Suitability, Disclosure & Fiduciary	Fiduciary breaches / guideline violations Suitability / disclosure issues (KYC, etc.) Retail consumer disclosure violations Breach of privacy Aggressive sales Account churning Misuse of confidential information Lender Liability
		Improper Business or Market Practices	Antitrust Improper trade / market practices Market manipulation Insider trading (on firm's account) Unlicensed activity Money laundering
		Product Flaws	Product defects (unauthorised, etc.) Model errors
		Selection, Sponsorship & Exposure	Failure to investigate client per guidelines Exceeding client exposure limits
		Advisory Activities	Disputes over performance of advisory activities
Damage to Physical Assets	Losses arising from loss or damage to physical assets from natural disaster or other events.	Disasters and other events	Natural disaster losses Human losses from external sources (terrorism, vandalism)
Business disruption and system failures	Losses arising from disruption of business or system failures	Systems	Hardware Software Telecommunications Utility outage / disruptions

Event-Type Category (Level 1)	Definition	Categories (Level 2)	Activity Examples (Level 3)
Execution, Delivery & Process Management	Losses from failed transaction processing or process management, from relations with trade counterparties and vendors	Transaction Capture, Execution & Maintenance	Miscommunication Data entry, maintenance or loading error Missed deadline or responsibility Model / system misoperation Accounting error / entity attribution error Other task misperformance Delivery failure Collateral management failure Reference Data Maintenance
		Monitoring and Reporting	Failed mandatory reporting obligation Inaccurate external report (loss incurred)
		Customer Intake and Documentation	Client permissions / disclaimers missing Legal documents missing / incomplete
		Customer / Client Account Management	Unapproved access given to accounts Incorrect client records (loss incurred) Negligent loss or damage of client assets
		Trade Counterparties	Non-client counterparty misperformance Misc. non-client counterparty disputes
		Vendors & Suppliers	Outsourcing Vendor disputes

Figure 1: Apr 2003 detailed categories for operational risk

Paper III



Manifold Conceptions of the Internal Auditing of Risk Culture in the Financial Sector

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Compliance with Ethical Standards

Conflict of interest

Vikash Kumar Sinha declares that he has no conflict of interest.

Marika Arena declares that she has no conflict of interest.

Abstract

Our exploratory study, based on 295 documents and 20 interviews, focuses on understanding the manifold conceptions of the internal auditing (IA) of risk culture in the financial sector of four different actor-groups – regulators, normalizers, consultants, and implementers. By inductive analysis of our data, we posit an interpretive scheme indicating two steps utilized by the different groups of actors in their IA approaches of risk culture: defining broad goals and designing visibility schemes. We further suggest that the visibility schemes of the actor-groups were based in the demarcation and calculation/qualculation of the object of audit (in our case risk culture) as well as in the data collection techniques of IA. Our interpretive schemes suggest two dichotomous interpretations of the four actor-groups concerning the IA of risk culture. The first interpretation, prevalent among regulators and implementers, promotes the control of culture primarily through verification. The second interpretation, adopted by consultants and normalizers, promotes the control of risk culture by IA along with the empowerment of employees through training programs. Our inductive interpretive schemes not only contribute to understanding IA expansions in general and IA expansions to non-tangible domains such as risk culture specifically but also enrichen the literature exploring the mechanisms different stakeholders use to shape weakly professionalized IA practices.

Keywords: Internal Audit; Risk Culture; Auditability; Financial Sector

Introduction

Recent banking failures and scandals are often linked to rampant and inappropriate risk culture that allows excessive risk taking in banks (Carretta et al. 2017; Palermo et al. 2016). As a reaction, regulators such as the Financial Stability Board (FSB), the Basel Committee on Banking Supervision (BCBS), and the European Banking Authority (EBA) issued broad guidelines on risk culture control, involving internal auditing (IA) processes (Ring et al. 2016). These regulatory initiatives stirred a controversial debate on the IA of risk culture among various stakeholders: the professional bodies – i.e., the Institute of Internal Auditors (IIA) and the Institute of Risk Managers (IRM), hereby referred to as the normalizers – consultants, and practitioners/implementers (Palermo et al. 2016). While the debate provoked various stakeholders contributing to the approaches to the IA of risk culture, it did not result in a shared understanding among them (Ashby et al. 2012).

This lack of a shared understanding among the different stakeholders provided empirical motivation for this study to understand their viewpoints. Further motivation for this paper arose from the three underlying challenges in the application of IA to risk culture. First, unlike organizational processes such as risk management where specific protocols, process ownership and departments provide tangible boundaries for IA (Hall et al. 2015; Mikes 2009, 2011), risk culture concerns the domain of individual motivations and behaviors beyond all protocols, departments and processes within organizations (Cornia et al. 2016). This raises ethical concerns on how far IA should colonize and control individuals and employees through the IA of risk culture (Ezzy 2001; McCabe 2014). Second, the problem of the IA of risk culture is exacerbated by an existing incoherent understanding of risk culture, its production or alteration within organizations (Palermo et al. 2016), and its relationship with the organizational culture (Schein 1990, 2004). Third, the problem of the IA of risk culture is further amplified by the fact that IA itself is not yet a standardized practice due to its expanding entanglement with different governance processes and a multitude of stakeholder expectations despite many normative initiatives since 1949 (Hayne and Free 2014; Spira and Page 2003). In fact, scholars elaborate on weak professionalization (Arena and Jeppesen 2009; Covalleski et al. 2003) and disparate IA practices not

only among implementers (Jiang et al. 2018; Rittenberg and Covaleski 2001; Roussy and Brivot 2016) and implementing organizations (Arena and Jeppesen 2015) but also among normalizers and regulators (Brown et al. 2014; Covaleski et al. 2003).

In addition to the three specific challenges mentioned above, a paucity of literature on “how IA expands to new domains” (cf. Archambeault et al. 2008; Gramling et al. 2004; Parker and Johnson 2017) and “how different stakeholders conceive IA expansions” (cf. Erasmus and Coetzee 2018; Roussy and Brivot 2016) created a fertile ground to understand the manifold viewpoints on the IA expansion to assure on risk culture. Consequently, our investigation focused on analyzing (1) how different actors – regulators, normalizers, consultants and implementers – conceive the IA of risk culture and (2) what type of approaches they embrace to audit risk culture.

Given the contextual ambiguities and contemporary nature of different stakeholders’ approaches to the IA of risk culture (Palermo et al. 2016; Ring et al. 2016), we conducted a qualitative explorative field study involving different stakeholders to understand their emergent ideas inductively (Chua 1986; Power and Gendron 2015). Following Roussy and Rodrigue (2016), the inductive examination involved a macroanalysis of 20 interviews on the conceptions of IA and a microanalysis of 295 documents containing details on the approaches of IA by the four groups of actors (regulators, normalizers, consultants and implementers).

Our findings indicate that regulators and implementers promoted the control of risk culture based on “regular” IA activities. The regulators restricted themselves to high-level guidelines and promoted the IA of risk culture as a new check and balance to mitigate what they observed as rampant cultural problems within banks. The implementers were reluctant in implementing any new “costly” changes to their IA activities in what they claimed were strategy and business model matters and thus included some elements of verification in their existing IA activities (primarily citing compliance reasons). Consultants and normalizers, in contrast, promoted a cautious approach of risk culture “control” by IA and empowerment of employees through training. Motivated to keep their thought leadership, the normalizers reconciled efforts from the regulators and the consultants to promote a library of toolkits

and a bricolage of ideas to guide implementing organizations. The consultants observed this as an opportunity to monetize new 'value-adding' solutions by promoting "comprehensive" control frameworks (including IA) and widespread employee empowerment. Our results on the heterogeneity of the conceptions of IA among different stakeholders may seem unsurprising given the ambiguity of the object of IA (risk culture in our case) and variations in the current IA practices. However, our results obviate three important implications.

First, the absence of implementers' support or coercive regulation on changing the conventional IA notions and techniques raises doubt on whether IA would be able to break free from its current paradigm of assuring tangible processes to the paradigm of assuring the intangible and unbounded objects of audit, such as risk culture and ethical values. There is a danger that a direct transfer of knowledge, without critical considerations on the intangibility of risk culture, could lead to a mere ritualistic thinking among implementers promoting a tick box-based verification approach of IA, thereby making IA inefficient or ineffective in controlling culture (Erasmus and Coetzee 2018; McCabe 2014; Power 1999). Second, the control and governance approach, if extended to employees' behavior, raises ethical concerns where excessive controls might rob employees of their individuality and dissociate them from critical and moral decision-making (leading to the colonization of employees' emotional self) (Ezzy 2001; McCabe 2014). Third, approaches from normalizers and consultants to the implementation of IA as a control mechanism balanced by the empowerment of employees through training seems theoretically plausible but pragmatically difficult to attain (McCabe 2014; Simons 1995). In practice, while empowered employees might use their entrepreneurial flair to contribute to value creation using their innovative/critical ideas, they might be difficult to control and could harm organizational well-being (Simons 1995). Moreover, solutions promoting a delicate balance of "control and empowerment", if achieved, would be context dependent (Simons 1995). While the context dependency might make IA practices suitable to organizational ambiguities (Englund et al. 2013) and lead to the professionalization of IA by allowing professionals to take non-transparent judgmental

approaches (Power 1999), it could at the same time diminish their independence and objectivity (Christopher et al. 2009; Goodwin and Yeo 2001; Roussy and Brivot 2016).

The rest of the paper is structured as follows. Section 2 reviews the IA literature and presents the gaps to be addressed by this study. Section 3 addresses the methodology. Section 4 presents the findings from the field study. Finally, the discussion and conclusion are presented.

The expansion of IA to new domains

The expansion of IA to various domains has recently attracted growing attention among academics (Archambeault et al. 2008; Gramling et al. 2004; Parker and Johnson 2017). Extant literature has shown a historically evolving expansion of IA from a transaction-oriented practice to a process-oriented practice involving control functions of risk management (de Zwaan et al. 2011; Stewart and Subramaniam 2010; Vinnari and Skærbæk 2014) and corporate governance (Chambers and Odar 2015; Collier and Zaman 2005; Spira and Page 2003). This expansion has enhanced IA's interaction with many stakeholders, including the auditee managers (Roussy and Rodrigue 2016; Sarens and De Beelde 2006), audit committees (L. J. Abbott et al. 2010; Goodwin 2003; Sarens et al. 2009, 2013), external auditors (Brody et al. 1998; Felix et al. 2001; Mat Zain et al. 2015; Mohamed et al. 2012), and banking supervisors (in the banking domain) (Chambers 2014). While some scholars have dubbed IA expansion as ineffective (Lenz and Sarens 2012; Neu et al. 2013; Roussy 2015; Roussy and Rodrigue 2016; Sarens et al. 2009), others have called it useful (Arena and Sarens 2015; Burton et al. 2012; Kaplan and Schultz 2007; Ma'ayan and Carmeli 2016). This dichotomous debate on usefulness and uselessness has made the idea of studying "how IA is carried out in different settings" interesting for scholars (Goodwin 2004).

One of the motivations for the IA expansion to various domains has been the waves of corporate and banking scandals that punctured trust in firms' behavior (Mueller et al. 2015; Neu et al. 2013; Parker and Johnson 2017). The trust deficit in corporations (Baud and Chiapello 2016; Chambers 2014; Collier and Zaman 2005), coupled with a societal trust deficit (Power 1997), spurred demands for tighter control. More often than not, scholars have linked the trust deficit to the dissociation of employees from their moral and ethical compass (Arel et al. 2012; MacLean et al. 2015). As a result of this trust deficit and employees' dissociation from moral and ethical compass, ethics and risk culture have recently been included in the ambit of IA (Brenner 1992; Palermo et al. 2016; Ring et al. 2016).

The inclusion of risk culture poses several challenges to the IA expansion. Unlike previous IA expansions to defined organizational processes, risk culture cannot be reduced to a definite process within the organization (Palermo et al. 2016; Schein 1990, 2004), limiting the possibility of extending the "control" and "governance" regimes of IA applied to tangible processes. The problem is exacerbated further by the IA's failure to achieve an independent and objective governance mechanisms in practice (Christopher et al. 2009; Mihret 2014). This failure is due to the involvement of different stakeholders (Erasmus and Coetzee 2018; Roussy and Brivot 2016), unclear ethical guidelines (Friedberg 1998) and fluidity of IA practices (Arena and Jeppesen 2015) that have allowed behavioral adjustments of internal auditors and in some cases in the wrong direction (Everett and Tremblay 2014; Neu et al. 2013). To fully understand the challenges of IA expansions to risk culture, we inductively explored (1) how different actors – regulators, normalizers, consultants and implementers – conceive the IA of risk culture and (2) what type of approaches they embrace to this aim. Furthermore, we informed our

inductive investigation on the IA of risk culture by distilling the knowledge and problematizing the three distinct approaches from the extant literature.

The first approach, focusing on what internal auditors do (Roussy 2015), revealed problems with normative expectations of IA as an independent and objective assurance and consultancy provider (Christopher et al. 2009). Commentators in this stream have blamed the non-objectivity and non-independence of internal auditors on their role conflicts (Morgan 1980; Soh and Martinov-Bennie 2015) and inter-role conflict in negotiations (Cohen et al. 2002; Roussy 2015; Roussy and Brivot 2016). For example, Roussy (2013) and Roussy and Rodrigue (2016) find that internal auditors team up with the auditee managers instead of with the audit committees and the boards. This siding with the auditee managers makes it comfortable for internal auditors in accessing data and information from the auditees (Goodwin and Yeo 2001). Internal auditors, keeping their distance from auditee managers, find data collection work tougher and are forced to have a likable character and use information-based arguments (Fanning and David Piercey 2014). Norman et al. (2010) demonstrate that internal auditors *“perceive more personal threats when they report high levels of risk directly to the audit committee”* and thus mild down the reporting of high-level risks. Teaming up with auditee managers or threat perception results in comfort provision by internal auditors to the control committees and the board of organizations in their reporting (Sarens et al. 2009). **While these studies teach us to understand IA practices by examining what internal auditors do and how they carry out their work**, they only tell a one-sided story of IA work.

The second approach adopted by scholars relies on investigating IA practices in different control process contexts, especially risk management (Arena et al. 2010, 2017; Castanheira et al. 2009; de

Zwaan et al. 2011; Vinnari and Skærbæk 2014) and corporate governance (Archambeault et al. 2008; Arena and Jeppesen 2015). These studies explore varying goals, configuration, competence, ethics and techniques of IA in these varying settings (Archambeault et al. 2008; Boyle et al. 2015; Burnaby et al. 2009; Burrell Nickell and Roberts 2014; Everett and Tremblay 2014; Selim et al. 2009). For example, Sarens and Lamboglia (2014) suggest varying competence and knowledge requirements for internal auditors in different domains. In this regard, some scholars suggest the rotation of employees to enrich the knowledge of internal auditors (Burton et al. 2015; Christ et al. 2015). While rotation might improve the quality of reporting (Christ et al. 2015), it could discourage employees and newcomers from joining IA teams by pointing to the general nature of the IA work (Bartlett et al. 2016). There are studies that explore the outsourcing of IA to third parties, as well. While outsourcing could improve the independence and objectivity of IA, it could discourage auditee managers from sharing information and thus result in lower audit quality (Abdolmohammadi 2013; Caplan et al. 2000; Prawitt et al. 2012; Speklé et al. 2007). Overall, studies in this stream reveal that in its quest for assuring a heterogeneity of processes (including risk management, corporate governance and internal control), IA has developed its techniques to merely verify the process of decision-making (Pentland 2000; Power 1999). Since verifying the content of a variety of processes could be challenging due to lack of content knowledge, internal auditors have used their techniques and knowledge to merely assure on the decision-making process. **While these studies teach us to look at rationales and approaches of IA,** they ignore the interactions and expectations of different stakeholders on IA rationales and approaches.

The third approach attempts to understand IA by studying different stakeholders, their involvement and their expectation with IA (Erasmus and Coetzee 2018; Roussy and Brivot 2016). Studying differing viewpoints and expectations of the major stakeholders and their influence on IA becomes important considering the influence of a variety of stakeholders on IA practices (Arena and Jeppesen 2009; Covaleski et al. 2003), as shown repeatedly through its historical development (Hayne and Free 2014; Parker and Johnson 2017; Spira and Page 2003). Scholars promoting this approach study influence of the auditee managers (Sarens and De Beelde 2006), external auditors (Brody et al. 1998; Felix et al. 2001), audit committees (Goodwin 2003), and regulators (Chambers 2014) in making IA indispensable. Furthermore, this emerging stream of research puts “interaction”, “influence”, “power asymmetry”, and “control” before typical contract-based relationships to explain IA work practices (Mihret 2014)., e.g., oversight or closeness of audit committees to IA functions has been shown to enhance the independence of IA functions (L. J. Abbott et al. 2010). Goodwin (2003) goes a step further and demonstrates that the accounting experience of audit committee members enables them to assess the work of internal auditors, thereby promoting the independence of the IA function. Sarens and De Beelde (2006) show how the expectations of senior managers from IA on monitoring risk management, internal control and corporate culture positively influence their work. Some studies within this approach cover historical contingencies and different rationales of IA expansions (Chambers and Odar 2015; Parker and Johnson 2017; Spira and Page 2003). **This stream teaches us to identify key stakeholders and include their views in understanding IA expansions.** However, like the other two approaches, the questioning has been limited to exploring IA as a control and governance mechanism

(Mihret 2014) or an independence and objective function (Christopher et al. 2009; Stewart and Subramaniam 2010) within the purview of its application to **processes**.

Research approach

Research Strategy

Given the contextual ambiguities and the contemporary but contested nature of different stakeholders' approaches to the IA of risk culture (Palermo et al. 2016; Ring et al. 2016), we conducted a qualitative explorative field study to inductively understand their approaches (Chua 1986; Power and Gendron 2015; Roussy and Rodrigue 2016). In doing so, we adopted a social constructivist approach, accepting that knowledge is created through interactions in a group of actors (Berger and Luckmann 1966; Wahlström 2009) who share a practice or a set of problems (Berger and Luckmann 1966; Wahlström 2009). The inductive approach informed the theoretically understudied IA expansion approaches with insights from the new empirical context of the IA of risk culture (Eisenhardt and Graebner 2007; Gioia et al. 2013; Power and Gendron 2015).

Data collection

We focused on the European context by relying on two data sources – interviews with 20 key informants and documents on the IA of risk culture by the four groups of actors (i.e., regulators, normalizers, consultants and implementers).

Semi-structured Interviews

We carried out interviews with 20 key informants (see Table 1). The informants from the regulators, normalizers and consulting organizations were selected to discuss their ideas on the IA of risk culture and collect information and documents authored/promoted by them on the IA of risk culture. The informants from the implementers such as risk managers, internal auditors, and members of the interest organizations were selected opportunistically, as we had access to these informants through our prior engagements with them.

-----INSERT TABLE 1 ABOUT HERE-----

The interviews, lasting from 30-120 minutes, were semi-structured and explorative in nature. The interviews focused on understanding the conceptions of the IA of risk culture, its linkages to other control systems and broad IA techniques. Informants were asked to freely draw from their experience with control systems within organizations, such as internal control, risk management, and corporate governance on the IA of risk culture. Out of the 20 interviews, 18 were recorded with the permission of the interviewees. In two interviews, where permission for recording was not granted, notes were taken during the interview.

Documents

Overall, 295 documents detailing the views of the four groups of actors (i.e., regulators, normalizers, consultants and implementers) were selected on the topic of the IA of risk culture. In total, 185 of these documents came from the regulators – the Financial Stability Board, the Basel Committee on Banking Supervision, and the European Banking Authority. These documents comprise standards, guidelines, and the lobbying responses (from other regulators, normalizers, consultants and implementers) on IA, risk culture, risk appetite, risk governance and corporate governance (see table 2.a for details).

-----INSERT TABLE 2.a ABOUT HERE-----

Another 47 documents from the Institute of Internal Auditors (IIA), the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and the Institute of Risk Managers (IRM) were collected to understand the perspectives of the normalizers (see table 2.b for details).

-----INSERT TABLE 2.b ABOUT HERE-----

Additionally, 58 documents issued after the financial crisis by the big four consulting firms (PWC, E&Y, Deloitte, KPMG) and Protiviti¹ on risk culture including IA approaches were

¹ Protiviti was included because the IIA global, IIA Italy and IRM indicated their collaboration with Protiviti on the issue. Protiviti consists of the remnants of the IA business of the previous large firm Arthur Andersen.

analyzed. We collected 5 documents from the implementers for the analysis (see table 2.c for details).

-----INSERT TABLE 2.c ABOUT HERE-----

Some informants provided private documents – the number and type of these documents are included in tables 2.a, b and c.

Data analysis

Following the guideline of naturalistic inquiry (Lincoln and Guba 1985) and constant comparison techniques (Corbin and Strauss 1990), we continuously analyzed the data during collection. This continuous analysis proved useful in finding areas that needed more data points. The analysis involved several steps. First, relevant data points were selected and analyzed separately for the four groups of actors: regulators, normalizers, consultants and implementers. Second, key events of a historical storyline were identified. Third, first-order open in vivo coding of the empirical data, represented by simple descriptive text codes in the language of the informants, was performed. Fourth, axial coding allowed the grouping of different in vivo empirical codes into second-order themes (Corbin and Strauss 1990; Gioia et al. 2013). In line with Gioia et al. (2013), the first-order quotes represented empirical reality, while the second-order themes were theoretical constructs representing the empirical reality. Finally, the relationship between the emergent second-order themes connected the empirical data to our emergent theoretical framework.

Theoretical Constructs

The approach of identifying theoretical constructs in an inductive empirical manner rather than identifying an existing concrete theory was inspired by Gioia et al. (2013). Gioia et al. (2013) suggest focusing on the language of informants while investigating new empirical phenomena (in our case the IA of “non-tangible” risk culture) that differ paradigmatically from existing phenomena (in our case the IA of any tangible process – risk management or corporate governance). Gioia et al. (2013) argue that ignoring the language of informants and focusing on an *a priori* theoretical construct in such cases

could result in a confirmation bias towards existing theoretical understanding and missed opportunity on construct refinement and theory building through new empirical paradigms. The table below exposes the ways we formulated the two theoretical constructs inductively.

-----INSERT TABLE 3 ABOUT HERE-----

The first theoretical construct that emerged concerned making the object of audit visible and auditable. To this aim, our inductive examination revealed three steps: boundary identification, calculation and adaptation of the techniques of the IA. Boundary identification was the first step towards making the object of the audit visible (Miller and O’Leary 1987; Vaivio 2006; Vaivio 1999). The boundary identification was mostly linked to understanding what to include and what to exclude (A. Abbott 1995; Bowker and Star 1996; Mikes 2009). Here, more specifically, we found the idea of “demarcating the object of audit” (Power 1997, 1999). The second step that emerged was calculation linked to the aspiration of rendering “organizational spaces knowable and governable” (Miller and O’Leary 1987; Miller and Power 2013; Vaivio 1999, 2006). Here, we found the use of both quantitative measures (calculations) (Mikes 2011; Power 2004) and qualitative areas of assessment (qualcalculations) (Callon and Law 2005; Callon and Muniesa 2005; Cochoy 2008). Third, we found techniques of IA aimed at collecting data for calculations/qualcalculations (Power 1999). In this study, we limited our focus to broad techniques used in collecting the information about the object of audit within the suggested boundaries. Consequently, we mainly focused on field techniques of interviews, surveys, questionnaires, and internal company data sources on processes and steering documents informing opinions on behavior and risk calculations. To keep the findings of this study comprehensible, we excluded data collection and theorization on auditor judgment techniques.

In the process of theorizing approaches on making the object of audit visible and auditable, we also found that the visibility schemes were tied to broad goals (Power 1999) and mostly represented a ‘style of thinking’ (Dean 1999; Foucault 1988a; Miller and Rose 2008; Rose and Miller 1992). This style of thinking was either explicated by the informants or mentioned in the documents. We found broad

goals to be non-singular or polymorphous in nature; i.e., there were varying goals among different actors (Dean 1999, pp. 17, 40).

Trustworthiness of Data and Analysis

We followed several tactics to enhance the trustworthiness of our data collection and analysis (Gioia et al. 2013). First, guaranteed anonymity allowed informants to freely speak their minds and present their viewpoints. Second, semi-structured interviews reduced the interviewer bias by limiting interviewer interference. Third, we enhanced trustworthiness by paraphrasing and confirming our interpretations and claims with the interviewees during the interviews. Fourth, we talked about recent events, countering recall biases in the interviewees' accounts.

Concerning the data analysis, data were stored and analyzed using a computer program, allowing for transparency, traceability and replicability. The triangulation of interviewees' information with information from documents provided the constructs with credibility and internal validity. Furthermore, historical timelines allowed for a better grasp of the contextual factors affecting theorization. In addition, the presentation to accounting and management researchers at our university and in conferences yielded feedback and input to improve the trustworthiness of our results and analysis. Finally, the exposure of our process affecting the relationship between the empirical material and theoretical constructs in the previous sections imparts additional transparency and trustworthiness.

Results

Regulators: Framing self-control, blaming practices

The European Union (EU) has a multilevel regulatory environment: national, European, and international (Bouwen 2002, 2004). While national standards/policies are driven by the national regulators (central banks, supervisory authorities or both), national regulations/laws are legalized by the national parliaments. On the European level, standards/policies are influenced by the European

Banking Authority (EBA) (a European-level equivalent supervisory authority of banks), but the actual laws and regulations (including directives) that bind member states are driven by the European Parliament, the European Commission and the Council of Ministers (Bouwen 2002, 2004). The European level standards/policies in turn are affected by international regulators, most notably the Basel Committee on Banking Supervision (BCBS) and the Financial Stability Board (FSB) (Kudrna and Puntcher Riekman 2018). Here, we restrict our analysis to the views of the three regulators, the FSB, the BCBS and the EBA, as these regulators have shown recent interest in the IA of risk culture. The idea of the IA of risk culture among regulators is tied to two concerns: culture as a factor of financial crises and the need to address cultural problems by detailing additional guidelines on self-control.

“Culture at financial institutions was one of the highlighted factors identified as an important factor contributing to financial crisis” (Informant 18)

“IA is there to bridge the asymmetry of information between the principle and the agent. (...) That already has been an issue (with IA) in some banks. The independence of IA was not sufficient (during the crisis).” (Informant 17)

At FSB, the discussion on culture started with concern about the governance of *“risk management culture”* and originated in an October 2011 progress report of the FSB to the G20. The document stated, *“risk governance (...) is critical to ensuring a strong risk management culture at firms”*. Further strengthening of the strong risk governance was advocated by identifying a well-defined risk appetite framework and having strong chief risk officers (CRO), chief executive officer (CEO) and audit committee (a top down approach). The discussion continued until April 2012, when the FSB sought opinions from different national supervisors during its thematic review on risk governance. The paper and consultation documents on the thematic review of risk governance mainly linked IA to a *“risk control framework”* and refrained from offering more details on control or IA approaches of risk management culture.

The discussion at the FSB on the governance of risk management culture later changed to the governance of *“risk culture”* in November 2012, when the FSB progress report to the G20 promoted a more detailed understanding on the governance of risk culture. The document stated, *“Strong risk culture at financial institutions is an essential element of good governance”*. The document

recommended that supervisors “explicitly assess risk culture at firms”. Several areas for the assessment of good risk culture such as “tone from the top”, “monitoring by senior managers and board”, “appropriate risk appetite framework definition and implementation”, “remuneration practices” and “escalation practices and policies” were propounded. The link of culture to the strategy and business model of banks and the strong top-down approach through a strong board, CEO and CRO were further promoted. In this document, IA is posited as a control function and a third line of defense that in tandem with risk management and compliance is considered crucial for risk culture control. IA’s “sufficient authority, stature, independence, resources and access to the Board” are posited as crucial for its usefulness in control of risk culture. This document recognizes the problem with the IA function in banks:

“The financial crisis, and more importantly recent events, demonstrates that internal audit functions should be empowered to constitute an effective third line of defense.”

Concrete quantitative indicators such as “number of audit findings not being closed”, “number of risk limits breached and their cause”, “the manner in which problems identified in IA reports are addressed”, “the preexisting awareness of the problems by the board” and “employee survey results” were promoted as strong indicators for the monitoring and control of culture. The document related risk culture to operational risk management culture.

“Risk culture is also related to operational risk in part because operational risk includes people risk: i) inadequate training; ii) insufficient personnel needed to adequately perform required tasks; iii) dependency on a limited number of qualified persons (e.g., key person dependency); iv) misalignment of business objectives and compensation programs; and v) inadequate mindset of control teams.”

It was not until February 2013, when the thematic review on risk governance was published, that a clear line of thought linking risk culture control to risk governance appeared. The board, top management and control systems (risk management, IA, compliance, and corporate governance) failure of banks during the financial crisis motivated this document.

The idea of firms controlling risk culture took root through the efforts of the FSB when, after several round tables with the industry experts (informant 18), the FSB published a consultation document on controlling risk culture becoming an opinion builder among the regulators, in 2013. In its contemporary

debates, the FSB acknowledges the non-measurability and intangibility of risk culture. On the issue of the calculability of risk culture, the informant 18 bluntly said, *“We are not measuring risk culture. You should talk to firms – culture is very firm driven. We issue guidance to help authorities assess risk culture”*. The non-quantifiability of risk culture was translated into propounding qualitative assessment areas: tone from the top, accountability of employees, effective communication from the board and incentive check in organizations.

It is hard to quantify (culture) right. Therefore, what we are saying is to look into culture and conduct related aspect in risk appetite framework, assessment and incentive plans. And to look at what the tone at the top is?” (Informant 18)

Though informant 18 refrained from the quantitative reductionism of culture, upon further queries on what quantitative indicators could be suitable, the informant suggested, *“No. of complaints to the managers, response of managers to the complaints. Customer feedback and things like that. These indicators could give a gauge on culture in a more quantitative way.”* The avoidance of the quantitative reduction of risk culture was promoted on two grounds: a) the policy-driven mandate of the FSB

“We are at the ten thousand foot level. We issue the guidance and how it is implemented varies across the jurisdictions. (...) The work we are doing is very policy driven.” (Informant 18)

And b) the non-intervention in banking business models

“We are not in the business of getting involved with banks’ business model and trying to shape them. We recognize that this has to be driven by management” (Informant 18)

Though direct involvement of the FSB on IA matters of risk culture were not highlighted, the broad goal for the IA of risk culture was IA as a control and governance mechanism.

“I do not know if FSB will go in too many details on internal audit. But I mean there will be a useful role of control for internal audit in this space. (...) However, the Guidelines on culture and toolkits (including IA) to assess them are very important for aligning the behavior of the employees” (Informant 18)

The FSB informant (18) also informed of the currently undergoing projects to look deeper into the *“misconduct issues”, “scientific view on culture”* and proposal of a *“toolkit”* to assess culture as their future plan. Informant 18 further stated, *“the next phase of culture work will begin next year (referring to 2018)”* and hesitantly disclosed *“we will not only look at risk culture but overall culture.”* On what kind of assessment tools will be included, informant 18 suggested that there was *“no direct way to the*

measurement on culture” but emphasized qualitative areas of assessment on “non-financial incentives and escalation policy”.

In contrast to the risk appetite- and risk governance-led context of the FSB, the IA of risk culture at the BCBS evolved from discussions of internal control, IA and corporate governance. The first standalone internal control guideline of 1998 by the BCBS recognized boards’ importance in creating a control culture to curb excessive risk taking. The high-level guidelines of the BCBS on IA (consultation in 2011 and finalization in 2012) do not even mention risk culture or culture once. The first separate corporate governance guideline by the BCBS in 1999 only mentioned “culture” to caution banks’ board to draft their compensation and remuneration policies in accordance with the culture. This rhetoric continued in the consultations and guidelines on corporate governance proposed by the BCBS until 2010. The high-level guidelines on corporate governance (consultation in 2014 and finalization in 2015) by the BCBS mentioned for the first time the risk culture concept and its audit and control.

“One of the primary objectives of this revision is to explicitly reinforce the collective oversight and risk governance responsibilities of the board. Another important objective is to emphasize key components of risk governance such as risk culture, risk appetite and their relationship to a bank’s risk capacity.” (Corporate governance final document 2015, page 4)

This document referred to the FSB documents, which had started appearing in parallel. Our informant suggested that the corporate governance of the BCBS was highly influenced by the risk governance framework of the FSB.

“Our (many) recommendations on the risk governance framework has been embedded to the Basel Committee corporate-governance framework”. (Informant 18)

As exemplified in the quotes below, the BCBS also linked the culture audit to the secondary system of risk governance and risk appetite and promoted audit as an independent internal control mechanism whose primary aim was to monitor and control the issues:

“The third line of defense consists of an independent and effective IA function. Among other things, it provides independent review and assurance on the quality and effectiveness of the bank’s risk governance framework including links to organizational culture, as well as strategic and business planning, compensation and decision-making processes. Internal auditors must be competent and appropriately trained and not involved in developing, implementing or operating the risk management function.”

(Corporate governance consultation document 2014, page 10; Corporate governance final document 2015, page 11)

This was emphasized by the BCBS informant (17) when he linked IA to the “culture of control” discussion: *“IA is before all internal. And the competence of internal auditors is to understand the controls and then you also need the bank to understand the controls and the existence of a culture of control”*. On risk culture audit, informant 17 suggested that it should include the entire universe of a bank: *“In addition, as we know the scope of internal audit that is the audit universe are all the units in a bank. Therefore, nothing should be left unaudited (with respect to risk culture) ranging from trading desk to the compliance department to the risk management function, procurement, HR including payrolls – you name it.”* The informant also suggested looking at the psychological and organizational aspect to assess culture:

“You want also to take into account some other aspects ...the psychology of the different actors and behavioral science and organizational aspects” (Informant 17)

However, on quantification, the BCBS informant raised a word of caution by saying,

“I think it would be dangerous in such a field (referring to risk culture) with internal audit, internal control, corporate governance to limit to view through quantitative analysis” (Informant 17)

In the European context, the EBA’s predecessor – the Committee of European Banking Supervisors – issued consultation paper CP24² (in July 2009 and finalized as CP25 in 2010) focusing on the “High-level principles for risk management” and included the control of risk culture. These documents loosely coupled risk culture with risk governance and communication issues.

“Institutions must implement a consistent risk culture and establish sound risk governance supported by an appropriate communication policy” (CP 24, page 3; CP 25, page 3)

The IA of risk culture approach was further refined in detail in the governance frameworks of CP44 and GL44 in October 2010 and September 2011, respectively, by pushing IA as a control function. Moving from the traditional broad principles on IA, in 2016, the EBA followed the FSB and tightly linked the IA of risk culture with the risk appetite- and risk governance-type secondary system in its new

² This consultation was mandated by the G-20 leader’s declaration of 15 November 2008.

consultation on governance. Here, again the IA is conceived as a control mechanism that monitors deviations through metrics.

“In particular, the institution should ensure that qualification of the IA function and its resources, in particular the monitoring tools and risk analysis methods, are in adequacy with its size, locations and the nature, scale and complexity of the risks associated with the institution’s model and business activities and risk culture and risk appetite.” (EBA/CP/2016/16, Page 49)

Normalizers: Balancing control and empowerment with assemblages of ideas and toolkits

To understand the normalizers’ viewpoints on the IA of risk culture, we focused on the three normalizers: the Institute of Internal Auditors (IIA), the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and the Institute of Risk Management (IRM). The reason behind the selection of these normalizers was twofold: first, their strong presence and influence and second, their recent interest in the IA of risk culture to keep their “thought leadership”.

The IIA propounded IA approaches of risk culture, tracing IA to the COSO internal control framework of 1992. where risk culture was pinned to the internal control environment, promoting organization-specific solutions for the IA of risk culture (Informant 19).

“Internal auditors need to be comfortable in their understanding of risk culture, establish a common risk language but, at the same time, keep in mind that there is no one-size-fits-all solution to audit culture.” (Privately shared IIA risk culture manual)

The IIA also relied on risk appetite as the first system for identifying how to audit risk culture:

“First thing to look at is to make sure that financial services firms have a risk appetite framework on how much risk are they going to expose their capital to, which actually is other people’s money.” (Informant 20)

However, the IIA warned against following the traditional models of IA as a control mechanism to guide the conduct of employees.

“There are many models that look at the components of organizational culture. It is, however, dangerous to reduce work on culture and behavior into one set of indicators based on a particular model. There is no one-size fits-all solution to auditing culture as organizations can be very different, even if they are producing the same or similar

outputs.” Chief Executive of Chartered Institute of Internal Auditors, UK (Chartered Institute of Internal Auditors 2014)

The IIA also identified challenges with techniques of IA applied to risk culture, namely, the inadequacy of surveys and interviews in gathering evidence and the requirement of judgment as a subjective element on the part of the auditors.

“I think with the soft aspects, you should aim to get a lot of answers. In this, survey and questionnaires can support you if you define these instruments in a similar way. Thus, these instruments reduce the collection bias. Whereas interviews have collection biases that you ask different interviewees differently and is difficult to scale.” (Informant 19)

“You cannot rely merely on data and examination of documents. The soft aspects highlighted from interviews and surveys along with judgment by the auditor plays an important role in effective assessment of risk culture” (Informant 19)

Remedies by embedding risk culture in all audits were suggested. Informant 20 suggested, *“There is a choice to be made on whether to carry out IA of risk culture separately or not. The risk culture survey and interview responses could be biased if conducted separately, since people can twist behavioral and cultural survey and interview responses purposefully. However, if risk culture audit is embedded in every audit, you could remove some of these biases.”*

Although the IIA approaches were cautionary, they did not provide concrete examples on how to be cautious. The risk culture manual shared by the IIA did not suggest any specific behavioral approach until organizations become mature and simply enumerated the FSB’s indicators. Here, the informants and the documents suggested that IA assume a consulting role in organizations starting risk culture implementations but an assurance role in organizations with growing maturity of implementations. Furthermore, apart from the traditional approaches of IA as a control mechanism, the IIA suggested the self-guidance of conduct by empowered employees.

“We want to make sure that the first line of defense that is the managers and operational employees in the line are proactively evaluating all types of risk that they are exposed to.” (Informant 20)

To promote employee self-guidance, the IIA promoted training and self-assessment on root cause analysis, cultural dissemination, and ethics (Chartered Institute of Internal Auditors 2014). Informant 20 further added, *“We also encourage internal auditors to ask the question why do you*

think this problem happens? We do this so that they can get to the root cause when it comes to actual audit.” The IIA also promoted collaboration with compliance functions by using its report and verification as additional cushion of control:

I do think that other areas could help with the risk culture. Compliance being the second line could help since risk culture is so much embedded in so many of the regulatory requirements. [...] IA could rely on the compliance function and its report. (...) While talking about using compliance report, we always promote internal auditors to ascertain the veracity of those reports. (Informant 20)

Furthermore, on compensation related issues, the IIA promoted the involvement of HR functions:

As part of a culture audit, IA could collaborate with the human resources in understanding the compensation and employee welfare and other aspects by introducing a few questions to the human resource surveys, which are already conducted within organizations. (Informant 20)

In summary, the IIA promoted both enhancement of IA as a control mechanism by utilizing behavioral indicators as well as training to empower employees in controlling their own conduct. Inadequate skills of current internal auditors, problems with reporting integrity, and IA as a part of the risk culture itself were highlighted as problems with the risk culture audit approach (Chartered Institute of Internal Auditors 2014). Ethics were consequently highly promoted in the IIA general training programs:

We have not identified any specific training in terms of business ethics and risk culture. We do talk about ethics in our beginner and advanced training and certification modules. (Informant 19)

The IIA informants' interview and document reveal their reliance on the COSO framework; we also examined the evolution of the risk culture concept in the COSO framework. The risk culture debate in the COSO framework is linked to the “control environment” element of the internal control framework in general. The framework does not use culture as an explicit term but refers to five broad principles that cover aspects of risk culture indirectly.

“The concept of risk culture does not originate with the IIA. I would actually point back to the concept of control environment in the internal control framework of COSO (of 1992). The internal control framework is old, but the risk culture term has gained popularity after the financial crisis of 2008. Within the five principles of the control environment of the COSO framework, we cover broadly the risk culture without using the term explicitly: commitment to integrity and ethical values, independence of board of directors,

transparent reporting lines, recruitment and nurturing employees to meet control environment objectives, accountability of individuals.” (Informant 20)

Our analysis indicates that the COSO internal control framework of 1992, its update in 2013, and subsequent clarification (e.g., the three lines of defense and regulations in 2015) refer to setting, evaluating and monitoring appropriate level of risks (risk appetite) at the firm policy level. The ERM framework of 2004 also supports risk appetite setting, evaluation and monitoring. However, starting in 2009, we find a direct reference to the culture related discussion, especially policy setting and board oversight on risk culture. In addition, a need for a “*risk aware culture*” is promoted, citing the embeddedness of the risk management system in the organizational culture. Informant 20 ascribed this “fashion” to the strong emergence of the risk culture discussion in regulatory circles. By 2010, risk oversight becomes embedded with qualitative indicators of assessment and monitoring culture, incentive, and tone of the top management on risk appetite and culture. From 2011 onwards, the ideas on organizational culture affecting key risk indicators (KRIs) and top managers setting and disseminating policy on risk culture started emerging as part of risk appetite discussions. By 2012, the awareness of culture among employees and measuring and monitoring through workshops and surveys emerged as an important discussion of embracing risk management. All these efforts on risk oversight, KRIs and risk appetite culminated in the 2017 COSO ERM framework linking enterprise risk management to culture and reinforcing the role of senior managers and boards in setting, disseminating and monitoring culture.

In line with the COSO and the IIA development, the IRM’s understanding on culture also emerges in their risk appetite framework of 2011 where advice on designing risk appetite (appropriate level of risk taking) considering “*risk management culture*” and “*control culture*” of the organizations is propounded. Here, risk appetite is linked to the corporate governance (guidance and control from the board). Furthermore, in line with the IIA, the IRM directly proposed a behavioral approach to risk in 2012:

“What is missing is the behavioral element: why do individuals, groups and organizations behave the way they do, and how does this affect all aspects of the management of risk?” (IRM risk management framework, 2012)

This behavioral approach of risk was rendered concrete by indicating the use of personality tools to measure individuals’ attitudes as indicators of risk culture.

“It is possible to measure predisposition to risk by use of personality assessment tools. Their basic rationale is that, with regard to risk taking, people vary enormously.” (IRM risk management framework, 2012)

Furthermore, while promoting the control of risk culture, the IRM proposed verifying not only the “tone at the top” but also the “tone at the bottom” and “at the individual level”. Although the IRM proposed publicizing well “-engineered” culture, it was not restricted to the idea that dysfunctionality or deviation from norms results in problems within organizations and thus needs curbing through disciplinary technologies. The IRM recognized that risk culture is a complex issue and control on behavior that is too tight could result in failure within organizations. As noted by the IRM framework:

“Risk culture is the sum of multiple interactions. At the lowest level, each individual’s personal predisposition to risk contributes to their ethical stance, how they behave and make decisions.” (IRM risk management framework, 2012)

The IRM did not propound a direct approach to the IA of risk culture but noted that a mere culture of control would be unable to encourage employees to behave appropriately, and it thus promoted personality assessment to help empower employees to make appropriate decisions:

“Taxi drivers and airline pilots are routinely given personality tests to determine how effectively they can exhibit self-control under stress – we should be ready to look at other key staff, managers and board members in the same way.” (IRM risk management framework, 2012)

Consultants: Comprehensive control, employee empowerment

Our analysis suggests that the consultants picked up on the issue of risk culture in the last decade and promoted a variety of branded approaches, e.g., Deloitte’s intelligent risk culture model, E&Y’s behavioral model, KPMG’s approach and PwC risk culture model. However, there were

several similarities in the varying approaches, as well. Many of these approaches recognized risk appetite and governance as important for risk culture control. However, moving beyond risk appetite and governance, consultants proposed a comprehensive framework where everyone in the organization was involved with the risk culture.

“It is about [all] people and how do they manage risks. It is not only about spreadsheets, modeling and mathematical issues.” (Informant 14)

“A robust and pervasive risk culture throughout the firm is essential. This risk culture should be embedded in the way the firm operates and should cover all areas and activities, with particular care not to limit risk management to specific business areas or to have it operate only as an audit or control function.” (Deloitte 2015)

This comprehensive control framework relied on self-assessment, tracking tools, risk controls and various indicators.

“What we have done in these cases are tracking, having risk controls, report regarding different indicators and propose self-assessment from board level and so on.” (Informant 13)

The control framework was fluid in nature, and its implementation was guided by the bank’s internal worldviews as well as regulations.

“If you then take a step back and think about the different banks, they all have their own sort of ideal of what the world looks like and that explains how they build up their internal control structure, how they build up their accounting framework and their own interpretation of what the original regulations meant and are they trying to reconcile it with a new set of regulations.” (Informant 12)

Though consultants suggested flexible approaches involving all employees, they argued that boards’ attention is easier to get, while it is much harder to get line management involvement.

“It is not hard to get attention from the board level. But it is tougher to get attention from the line manager level. Because line managers, they have many things to manage.” (Informant 13)

This apathy from the line managers was blamed on the lack of a process view that permeates banking organizations.

“There is a lack of process view. Big banks have been too much concerned about money here money there. They fail to have the process view.” (Informant 13)

In fact, consultants suggested that boards worry about having a “grip on the culture related things” and are keen to have measures, “tools as risk indicators that can help them evaluate, control and

mitigate risks.” To align the employees, “incentives” and “education” were both proposed as a mitigation tool (Informant 13).

To make line managers and employees involved, accountable and aware of their responsibilities, consultants suggested empowering employees through training and self-assessment tests. Consultants rationalized training and self-assessment by arguing that employees make many decisions in organizations, and educated employees contribute to better risk culture through their independent behaviors on risk-related decisions:

“The institution provides and requires core training, professional development and assessment to ensure the bounds of acceptable and unacceptable behavior are understood.” (E&Y 2014)

“Employees have the skills necessary to complete what is asked of them, and feel comfortable to ask questions or pose challenge” (KPMG 2016)

“But without training, there is no basis for critical thinking and judgement around risk decision-making” (KPMG 2009)

In terms of assessment of culture, the consultants proposed assessing tools on the individual level that measured “*identity, belonging and behavior*” (Informant 14). In fact, the consultants agreed that most of the metrics of culture were old and emerged with the application of “*cultural tools*” involving “*organizational psychology*” to measure the “*people dimension*” of risks and “*alignment of culture*” endeavors (Informant 14).

“At PwC, our approach is to reach below the surface of the traditional internal audit to shed some light on the culture and behaviors that underpin effective corporate controls. We include behavioral psychologists – and their methodologies – as an integral part of the team in a range of audits and reviews, providing both qualitative and quantitative risk culture feedback.” (PwC 2009)

In doing so, consultants recognized the delicate balance between control and empowerment:

“Ensuring that people within an organization behave with integrity and in accord with the values and goals of the firm depends upon the balance between the firms’ stated rules and expectations, referred to as the entity-level instruments, and other factors that frame and condition an individual’s expectations of proper behavior, the cultural drivers.” (KPMG 2016)

“EY’s model incorporates the “tangible” elements of organizational structures and risk management systems (the culture mechanisms) with the more “intangible” elements of behavior.” (E&Y 2015)

The measurement and reporting approaches of the consultants were flexible and adaptable, where their clients could *"define what they want to measure and what they want to report"* (informant 13). Consultants argued that *mere measurement, evaluation and monitoring* could attract a senior manager's attention *if the trends reveal something unusual* (Informant 13). Some consultants argued that mismatch between banks' old models and language makes it difficult to implement changes on culture.

This causes quite a lot of work, quite a lot of worries I would say, because suddenly you're going to get something that doesn't fit in with your old model, with your old language so to speak. And I believe that the banks are really struggling with this because it's at the core of their business model. (Informant 12)

One of the consultants went on to explain that the problem was not measuring culture but changing it. Informant 14 noted *"It is one thing to measure it [risk culture]. It could definitely be measured [to some extent]. But the problem is how to fix it."* The other consultant pointed to the judgment and flexibility requirement for the assessment of culture:

There's also a lot of conceptual issues and a lot of judgement and that's the interesting part of it. (Informant 12)

Here, consultants specifically pointed to challenges with corporate governance, internal control, and IA. Consultants proposed that *"creating procedures and level of checking"* as well as *"independence"* were of utmost importance for all governance functions (Informant 13). Some consultants argued that internal auditors need to be independent enough to *"challenge the risk control functions in their approach of control"* (Informant 12).

Hence, consultants proposed *"validation and check"* from IA as well as external consultants (informant 13). Some consultants proposed *"pattern matching"* and *"big data analysis"* to understand behavioral issues where such data were available (informant 13). They argued that *"it is subjective"* and *"requires appropriate judgment"* and *"education"* of the board members and control functions (Informant 13). The consultants criticized the traditional IA practices of control as debilitating and recognized that the traditional notions of IA do not empower employees, and thus, employees do not take ownership of risks:

“While we recognize that the 2013 FSB guidance has called on IA to report on effectiveness of risk appetite frameworks, it has not recognized the debilitating impact of regulators continuing to support the traditional IA paradigm (...) which promotes avoidance of risk ownership.” – Risk Oversight responding to FSB risk culture paper

Implementers: Control and compliance

On the issue of risk culture, the implementers promoted the traditional “control of the control” model of IA and involvement with corporate governance. Informant 8 remarked, *“We [risk control] are more involved in the development, check whether the model is compliant, and IA must verify whether what we do is correct in our work. So, they verify our process of validation, testing and analysis.”* Even audit manuals emphasized such views explicitly:

IA must control that the Bank has to adopt suitable devices for corporate governance and adequate mechanisms of management and control. (Large Bank-2 Audit Manual- referring to all IA work including risk culture)

The traditional “control of the control” model of IA by the implementers could be justified considering their demand concerning ambiguous guidance on the issue of risk culture audit:

“There are no consistent standards, no consistent guidance, no tools, (...). It’s all new, uncharted territory. With Sarbanes-Oxley, there were defined steps supported by guidance. But with auditing culture, there is a lack of clear guidance from regulators about what they’re looking for.” (IIA workshop document quoting chief audit executive-1)

“[It] is important to create a common global framework [Risk Appetite framework], in particular, the creation of a common nomenclature for supervisors and banks” – Swedish Bankers’ association on Risk Appetite framework of the FSB

“Verification”, “identification of irregularities” and “operational errors” were the buzzwords that implementers related quite frequently to IA approaches.

“The auditors have to check if the main information given is correct or not.” (Informant 7)

“When we carry out an audit and we identify irregularities in processes.” (Informant 9)

“Actually we have recently been discussing at work what happens. [...] if something goes wrong [at the fund companies]? If something is [...] calculated in a wrong way and some people have sold and bought units on that. So this is a debate that we have [...] how [...] can you develop internal systems and internal control in order to avoid this.” (Informant 1)

The verifications proposed were of three types. First, documental analysis was purported to evaluate the adequacy of the documentation by verifying the official documentation produced by the different

functions. Second, empirical analysis of data was promoted to ensure the level of implementation and performance of processes/systems. Third, practice verifications using interviews and on-site visits were suggested. However, these verification principles were high-level, and their implementation was left to lower-level operations to be verified (IA manual of large bank 2). The high-level guideline on verification allowed for adjustment. As informant 7 noted, *“Then you have cultural problems, cultural differences actually [...], that you need to somehow take into consideration. And then you have the relationship between head office and subsidiary, which somehow creates situations that you have to be, how can I say, to be able to differentiate between different situations.”* The verification approaches also promoted the traceability of evidence:

“If you ask the insurance manager, do our sales people receive training [...], but then he'd say yes. I want to see some proof like certification, e-learning certification for example. What is not written does not exist in our world.” (Informant 4)

To achieve traceability, the implementers recommended formalization and documentation of line managements' activities and sought their involvement in this regard. As informant 4 recalled, *“Even the activities to be carried out by line management have to be formalized in some way. [...] It has to be formalized, because we need proof of it. In case we get an inquiry from supervisory authorities or the board.”* Informant 10 suggested employee participation in this process: *“What you would do is you would initially have all the interviews with them (employees) to understand what are the developments, what are their objectives, what do they plan for the future? You would collect a lot of information and you would do your own analysis. Then you would do the risk assessment how you see where the biggest risks are. Then you will go to them and say, “Well this is how we see the risk. How do you see the risks?”* Despite promoting the involvement of employees and the first line of defense, the board's guidance on risk appetite and level of risk taking was identified as crucial.

“What we're trying to do is to strengthen the first line of defense regarding risk management. [...] We have appointed risk owners to make sure that we all mention the risks in line with the decided risk cap types that are decided by the Board.” (Informant 5)

“The risk appetite framework and governance process and its embedding at all levels of the organization will help to make the risk culture tangible by promoting and enabling the right understanding and conversations at all levels.” - HSBC responding to FSB risk culture paper

Furthermore, since banking is regulation driven, implementers also suggested keeping tabs on the legislations and creating what they called regulatory audits:

“We keep abreast of legislation/regulation on the topic but find that the topic is usually discussed in generalities.” (IIA case document quoting chief audit executive-2)

“So all I do is to be pushed by regulatory requirement. The other part of the department, they can make their own judgment – [like...], we should do away with this [audit] because this area looks a bit volatile. [All] they do is risk-based assessment. My audits, I do are driven by regulatory requirements. So the business cannot say we shouldn't do them.” (Informant 9)

The idea of board-driven risk appetite and involvement of the first line of defense, i.e., employees, was addressed through involvement and monitoring by the control functions.

“On a daily basis, we’re monitoring the risk, managing the risk evolution or development in order to make sure that the company is managed within the decided risk cap size. So, these figures are monitored frequently.” (Informant 5)

“We believe there are many mechanisms that support the development of a sound risk culture including (but not limited to) the compensation framework, the performance assessment process, and the risk appetite and risk management frameworks.” - - Deutsch Bank responding to FSB risk culture paper

Even advanced approaches demonstrated the control and monitoring-based understanding on the IA of risk culture. Informant 18, reflecting on her recent banking risk culture workshop, remarked, *“Some banks are using big data to monitor their risk culture. They can analyze the behavioral patterns of the big data to assess culture.”*

The IA processes of implementers focused on measurement, reporting and issue handling processes, as well. informant 4 remarked, *“[Y]ou need to measure it, you need to steer it, you need to follow up and report it and these four steps are very important in the first line of defense work within the financial institution.”* Measurements and reporting especially involved metrics such as inadequate training, ineffective processes or lack of procedures.

“Our reports will include issues that are symptoms of broader culture issues within a business area such as inadequate training, ineffective processes, or lack of procedures, and we will work with the appropriate level of management to develop action plans that adequately address the underlying root cause.” (IIA case-document quoting IA head-1)

“It includes such elements as a history of errors, a pattern of repeat audit findings, concerns about management surfaced by IA, or concerns presented to IA by others.” (IIA case-document quoting IA head-2)

The implementers promoted a measurement and metrics-based approach of IA of risk culture audit, arguing that metrics are useful for the boards to make consistent judgement considering the subjectivities of risk culture:

“Given (...) subjectivity across many jurisdictional boundaries, what we, as risk professionals, have to offer is a direction toward a quantitative floor for boards and their management from which to allow supervisors to make consistent judgments.” – Blue Ribbon Advisory Panel of the Professional Risk Managers’ International Association responding to FSB risk culture paper

Apart from metrics, issue identification itself was shown to be valuable for promoting changes in the systems. As noted by Informant 5, *“[The] intention is to set up a form so we can prioritize how these incidents should be avoided in the future and how they should be solved, if they are not solved instantly, if there are many incidents – if you need to change the process or if you need to change the system or whatever.”* Issue identification was not considered sufficient for IA activities; issue-handling processes were employed to advise the line functions. Informant 4 remarked, *“No, we don't [fix] the deviation, we make suggestions [on] how the deviation could be or should be [fixed], – we [audit and the auditee] agree on – there has to be a deadline timeframe.”* Here, some implementers suggested that they see themselves as help to line managers.

“We try to see the internal auditor as help [to the auditees] rather than just writing something bad [about them] that we found. It's normal to have open issues. It's perfectly fine everyone has it. If you don't have them, that's really weird.” (Informant 10)

The involvement of line managers also meant that the issue handling processes relied on negotiation with the line managers. Informant 10 remarked, *“When we do an audit and we identify irregularities, a lot of the times there are process irregularities. We will report all of the findings, but before we report we of course will have the discussion with the auditee and we will agree that this is a problem and how we describe the problem.”* However, communication with line managers was considered tricky, and the informants identified compromised independence of the control functions in this regard:

“Yes, but this is one issue that has been brought up from the control functions like myself [the risk control function], the compliance function and [the] IA, as we see that there is a risk of not being independent and that could be a risk of conflicts of interest.” (Informant 5)

Consequently, to maintain the independence of control functions, some implementers even opposed the advisory roles attributed to control functions:

"The wording seems to suggest that compliance and other control functions' primary activity is to act as advisors. We have a strong view that these functions should first and foremost act as a risk control function and then secondly, and to a much lesser extent, an advisory function." - - HSBC responding to FSB risk culture paper

Although issue identification, mitigation advice and reporting were carried out in consultation and communication with line managers, issue closing was dependent on verification. As noted by informant 10, *"Well you have a lot of communication on open issues, right. Because for example these open issues that are in our system they need to get closed. Whenever something has been done to close the issues then we have to look at it and ascertain that it's really been closed."*

We speculate that the implementers stuck to the traditional view of IA as verification because they recognized that controlling the behaviors of employees (such as compliance to a set rule or adherence to policies) was essential in curbing problems within organizations. Hence, the focus of IA and control was on curbing dysfunctionality or intentional breaches of policies from employees.

"We agree that non-adherence to a code of conduct should affect compensation and career prospects." - World Savings and Retail Banking Institute (WSRBI) responding to FSB risk culture paper

"It should be clearly stated that only those breaches in internal policies, procedures and risk limits which prove to be intentional should have an impact on the compensation and career of the employees that are responsible for them." - - WSRBI responding to FSB risk culture paper

The implementers also resented the tight guidelines of the regulatory authorities. For example, the implementers and their associations opposed detailed recommendation on risk appetite by the regulators:

While DB's current risk appetite framework is largely in line with the principles, we are concerned that a requirement to establish risk limits at a legal entity level is too broad-reaching. – Deutsche bank on risk appetite framework by the FSB

It should thus be mentioned that, even though setting definitions may be useful, institutions shall retain some flexibility in the way they will articulate their own framework and in the key elements they wish to use in order to do so. - - French Banking Federation on risk appetite framework by the FSB

However, when the regulators issued risk culture guideline, the implementers and their lobbying organizations opposed such measures by saying that risk appetite was enough:

*“We feel, however, that **the Risk Appetite Framework (RAF) is the embodiment of an institution’s risk culture** and that it is unnecessary to go beyond assessing the robustness of the RAF (...). Therefore, the **guidelines for assessing risk culture should avoid adding new layers** or expectations of new processes being created and leverage existing tools and requirements to assess risk culture” – CRO forum on risk culture*

To keep the control loose, the implementers demanded fluidity in IA guidelines, a “rule-based approach”, and “tools” from the regulators:

“All the tools listed here may be helpful, but it is important that the final guidance is clear that no suite of tools should be considered as a checklist for either management or supervisors.” - Deutsch Bank responding to FSB risk culture paper

Practitioner-based organizations helped implementers in promoting their views. In this regard, the discussion with the FSB informant revealed an influential body of practitioners known as the G30. The G30 introduced its views on risk culture, its audit and supervision in October 2013. In this document, the G30 moved from the issue of risk governance and risk appetite to risk culture, thereby latching on to the existing secondary system for verification. Although the G30 did not detail the IA of risk culture, it indicated that compliance to an *a priori* set standard was the preferred way to audit risk culture in banks. The G30 later confirmed this in a separate document in 2015 by recommending the development of “*a comprehensive set of indicators to monitor and assess individual and team adherence to firm values and desired conduct.*” (G30, Banking Conduct and Culture document, page 50). The G30 also recommended upgrading of the IA “skill set” and strengthening of the “organizational independence.” (G30, Banking Conduct and Culture document, page 63)

Discussion

Our empirical findings reveal the way different stakeholders conceived the IA of risk culture. The model below sums up our findings (see figure 1). Our inductively designed model suggests that the intentions of the actors affected their broad goals concerning the IA of risk culture. Both the intentions and broad

goals were contingent on the history and context (Parker and Johnson 2017). The broad goals, in turn, affected the approaches of demarcation, calculation/qualculation and techniques that attributed visibility and auditability to the object of IA. In this section, the proposed model and its elements are further explored from the perspective of the different actors along with the implications of our results.

-----INSERT FIGURE 1 ABOUT HERE-----

Both the regulators and the implementers understood IA as a control mechanism (w.r.t risk culture) to monitor and control the behavior of employees by the conformance of their conduct to codes and policies set by top management and the board, but the two groups of actors had divergent goals and political intentions. The regulators focused on installing new self-checks and balances to curb excessive risk taking by banks in the aftermath of the financial crisis (Baud and Chiapello 2016; Wahlström 2009). Numerous studies in the extant accounting and auditing literature confirm this point (Collier and Zaman 2005; Mihret 2014; Sarens et al. 2013). As our results suggest, historically, the regulators have perceived IA as a control and governance mechanism (Chambers 2014), and this thinking was embedded in their propounded rationale for the IA of risk culture. Furthermore, contrary to the recent thesis of Baud and Chiapello (2016), the regulators still believed in self-regulation and were reluctant to suggest a very strict approach to the IA of risk culture (Power 1997, 1999). The implementers, in contrast, promoted the status quo of IA avoiding costly implementations, citing intervention in the profiteering activities of risk exploitation (Wahlström 2006, 2009). The emphasis on monitoring and control promoted the objectification of individuals' conduct, highlighting dysfunctional and unwarranted behavior as the prime reason for failures and disasters (Baud and Chiapello 2016; MacLulich 2003; Vaughan 1999).

The regulators and the implementers reached the IA of risk culture in steps that involved making risk culture visible with existing systems of risk appetite and risk governance. Furthermore, both the regulators and the implementers focused on the four qualitative areas of assessment: presence of the definition of risk culture, risk appetite and risk governance in policy documents; communication of such definitions to employees; monitoring by the board; and promotion of "appropriate" behavior

through incentives. None of these areas of assessment were new (L. J. Abbott et al. 2010; Morgan 1980), but they were adapted to include the elements of risk culture. While suggesting such simplistic adaptations, the regulators and the implementers accepted the inadequacy of the calculability of risk culture, the requirement of the involvement of all employees and the ineffectiveness of the traditional IA outcomes (Power 1999). Though the regulators noted “problems” with the existing practices of IA, they thought it to be irrelevant when it came to modifying the IA techniques. In maintaining status quo and avoiding investments, the implementers also favored the inclusion of risk culture elements in their existing routines of IA. Therefore, both groups of actors favored the adaptation of existing IA techniques, as tracing evidence in interviews, surveys and documents informing on protocols, process ownership and departments remained popular techniques of data collection (Norman et al. 2010; Power 1999, 2000).

In contrast to the regulators and the implementers, the normalizers and the consultants propounded IA as a control mechanism coupled with the empowerment of the first line of defense (employees) by training them and allowing them to raise their voices and views (Foucault 1988b; Townley 1994). The normalizers’ documents reveal that they worked regularly with consultants (Hayne and Free 2014) in developing their framework, and thus, the consultants’ viewpoints affected them. The normalizers also wanted to legitimize their expertise as thought leaders (Hayne and Free 2014). Consequently, the normalizers tied their view on the IA of risk culture to their professional frameworks (Roussy and Brivot 2016). Motivated to keep their thought leadership, the normalizers reconciled efforts from the regulators and the consultants to promote a library of toolkits and a bricolage of ideas to guide implementing organizations. The consultants were interested in positing IA as a part of a comprehensive control framework within organizations. Apart from their not-so-narrow focus on IA, their idea to sell solutions and monetize them played an important part in addressing the IA of risk culture as a paradigmatic change (Christensen and Skærbæk 2010).

Similar to the regulators and implementers, the normalizers and the consultants relied on the concepts of risk appetite and risk governance to render risk culture visible. However, these actors proposed the

assessment of risk culture through psychological and behavioral measurements using surveys and interviews. In doing so, these actors acknowledged that the business of banking is based on appropriate risk exploitation and risk taking (Mikes 2009; Palermo et al. 2016). Thus, apart from proposing new behavioral approaches to measure, monitor and control risk culture, these actors proposed training, employee participation and self-assessment of employees that could enable employees to make informed decisions on risk taking (Covaleski et al. 1998; Foucault 1988b). To sum up, these groups of actors understood that living human beings can be empowered by expertise and knowledge to mobilize the appropriate contextual conduct (Dean 1999, p. 22), allowing employees to be critical decision makers (McCabe 2014)

-----INSERT TABLE 4 ABOUT HERE-----

The heterogeneity of the conceptions of IA among different stakeholders might seem unsurprising given the ambiguity of the object of IA (risk culture in our case) and the variety of current IA practices. However, our findings reveal many relevant implications. First, the absence of the implementers' support or coercive regulation on changing the conventional IA notions and techniques raises doubt on whether IA in the near term would be able to break free from its current paradigm of securing tangible processes to the new paradigm of securing individual motivations and attitudes of the employees guided by risk culture and ethical values within organizations. There is real danger that a direct transfer of knowledge, without critical considerations on intangibility of risk culture, could lead to a mere ritualistic thinking among implementers, promoting an ineffective tick-box-based compliance approach of IA in controlling culture (McCabe 2014; Power 1999). Second, the current control and governance focus of the different stakeholders is based on the calculation (Callon and Muniesa 2005; Vaivio 1999, 2006) and qualculation (Callon and Law 2005; Cochoy 2008) associated with tangible processes that facilitate discernible trails for verification and accountability during traditional applications of IA (Goodwin and Yeo 2001; Vaivio 1999, 2006). This type of control approach mired in calculation/qualculation, if extended to employees' behavior, could rob employees of their individuality as well as their critical and moral thinking (leading to the colonization of employees'

emotional self) (Ezzy 2001; McCabe 2014). Third, the approaches of normalizers and consultants to the implementation of IA as a control mechanism balanced by the empowerment of employees through training seem theoretically plausible but could be pragmatically difficult to attain (McCabe 2014; Simons 1995). Theoretically, empowering employees through training and self-assessment might help control the problems arising from an uncritical mechanistic approach of thinking and avoid colonization of the employees' self. At the same time, independent and objective control by IA could help curb problems due to policy violation, dysfunctionality and abnormal decisions that harm organizations (Morales et al. 2014; Vaughan 1999). In practice, empowered employees could contribute to value creation through their innovative ideas, but they could also be difficult to control and could harm organizational well-being (Simons 1995). In addition, solutions with a delicate balance of "control and empowerment", if achieved, could be context dependent (Simons 1995). While the context dependency might help IA practices in becoming suitable to organizational ambiguities (Englund et al. 2013) and professionalization endeavors by requiring non-transparent judgmental approaches (Power 1999), at the same time, it could diminish the independence and objectivity of IA (Christopher et al. 2009; Goodwin and Yeo 2001; Roussy and Brivot 2016).

Conclusion

This paper set out to analyze how different actors – regulators, normalizers, consultants and implementers – conceive the IA of risk culture and embrace different approaches to achieve this aim. Before highlighting our contribution, we acknowledge several limitations of our study and explicate avenues for future research. First, our study relies on heterogeneous data sources, such as documents drafted for different purposes. This implies that our findings could be improved by employing a "homogeneous" set of data generated by interviews or by experimentation techniques utilizing different groups of actors solving/debating cases of IA expansions. Second, our study has not exhausted the disparate viewpoints on the IA of risk culture. In fact, differences in viewpoints may exist at different levels within organizations. Consequently, investigating how the IA of risk culture is

implemented in organizations could enrich differences in understanding among the board, audit committees, internal auditors, compliance team members and risk managers. Documenting these plural viewpoints could reveal aspects on IA applied to understudied intangible contexts of risk culture and business ethics. Furthermore, longitudinal research could inform whether the differences in the IA approaches to risk culture elaborated in this study will continue to exist or whether the emergence of a dominant approach will prevail over all other approaches. Third, since many studies provide evidence on IA being an ethically compromised control and governance practice (Everett and Tremblay 2014; Ferry et al. 2017; Roussy 2013; Roussy and Rodrigue 2016), it could be important to understand how an ethically compromised IA could assure and consult on risk culture and ethical issues. Consequently, we also promote further studies on the ethical dilemma faced by internal auditors in carrying out risk culture or ethics audit. Fourth, we limited our focus to auditee related data collection techniques of IA, and therefore, we promote further studies on judgement approaches and “auditee’s account giving” as a means to problematize the conceptions of IA in the risk culture domain.

Finally, our research posits three main contributions. First, we contribute to understanding how IA could be extended to intangible objects such as risk culture and ethics. While we do not claim to posit a concrete solution on IA expansions to intangible and ambiguous ideas such as risk culture and business ethics, we do present an insightful framework that can benefit the academic as well as the practitioner community in rethinking the concept of IA and audit in general vis-à-vis its new applications. Our proposed framework provides a systematic way of considering how objects of audit could be made visible by demarcation (A. Abbott 1995; Bowker and Star 1996) and then auditable by calculation/qualculation (Callon and Law 2005; Callon and Muniesa 2005; Cochoy 2008) and IA techniques (Power 1999).

Second, we address scholars’ call to examine how audit gets accepted into new domains (Kaspersen and Johansen 2016; Pentland 2000; Power 1996). However, in contrast to the existing studies on external audit expansions (Free et al. 2009; Power 1996; Robson et al. 2007), we focused on IA expansions where theoretical literature is scarce (Gramling et al. 2004; Parker and Johnson 2017) and

practices tend to be heterogeneous (Arena and Jeppesen 2015; Roussy and Brivot 2016). The risk culture context of IA extended the “systems of audit” concept applied in relation to tangible processes (Power 1997, 1999). In contrast to the organized processes, risk culture cannot be non-controversially reflected in “tangible” systems since risk culture transcends all protocols and departments and enters the domain of individual behaviors and motivations (Ashby et al. 2012; Schein 2004). This intangibility shifts the focus from the idea of IA expansion as a mere legitimization of the techniques of auditing processes or secondary systems to a paradigmatic shift in understanding the visibility and auditability of the object of IA.

Third, we address scholars’ call to understand the manifold conceptions of IA and its contextual and historical drivers (cf. Erasmus and Coetzee 2018; Roussy and Brivot 2016). In doing so, we enrich the literature on the IA of risk culture that focused on either the contextual viewpoints of implementers (Carretta et al. 2017; Cornia et al. 2016; Palermo et al. 2016) or the regulatory viewpoints (Power 1999; Ring et al. 2016) by highlighting its manifold notion.

Compliance with Ethical Standards:

Ethical Approval

All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed Consent

Informed consent was obtained from all individual participants included in the study.

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Fig 1: Audit model for risk culture

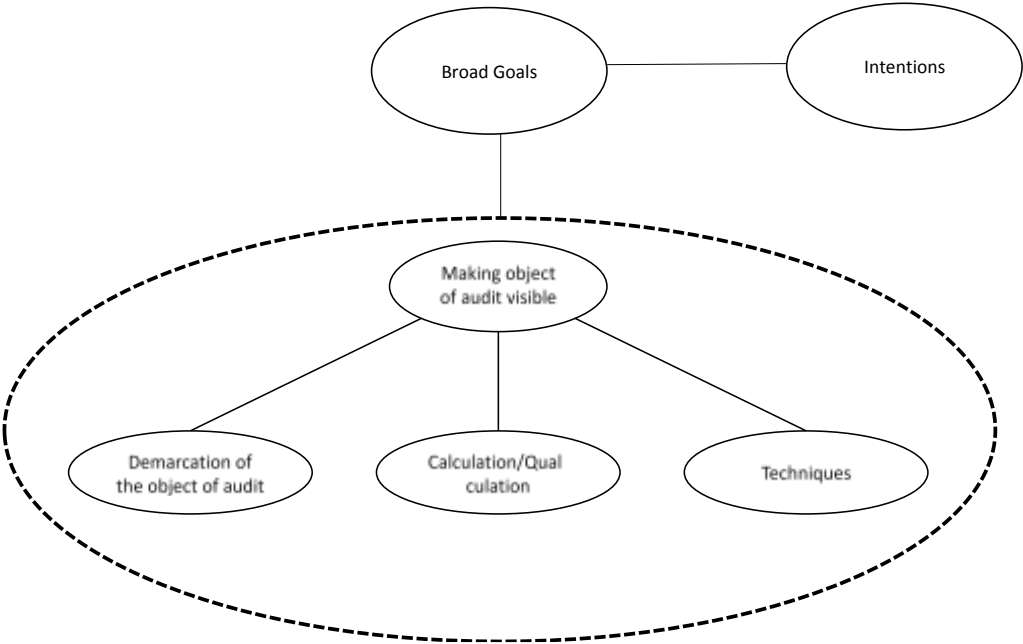


Table 1: Interviews

No.	Organization	Informant
Implementers		
1	Interest Organization-1	Chief Analyst, Risk and Audit
2	Interest Organization-1	Chief Jurist, Risk and Compliance
3	Interest Organization-2	Senior Legal Advisor, Risk and Compliance
4	Large Bank-1	Audit and compliance head
5	Large Bank-1	Risk Head
6	Large Bank-2	Internal Auditor
7	Large bank-2	Internal Auditor
8	Large bank-2	Chief Credit Risk Officer
9	Large bank -3	Internal Auditor
10	Large bank-3	Internal Auditor
Consultants		
11	Big-4	Partner, Financial Services (Risk and Compliance)
12	Big-4	Director, IFRS Services
13	Big-4	Director, Financial Services (Risk and Compliance)
14	Big-4	Manager, Risk and IA Services
15	Protiviti	Director, Financial Services (Internal Audit)
16	Protiviti	Manager, Financial Services (Internal Audit)
Regulators		
17	BCBS	Member Secretariat
18	FSB	Member Secretariat
Normalizers		
19	IIA	Technical Manager, Italy
20	IIA	Global Director, Financial Services Audit

Table 2.a.: Documents from Regulators

Actors	No. of Documents	Comments
BCBS	52	(Standards and Guideline: 11, News: 3, Lobbying responses on standards and guidelines: 38 ^{&})
FSB	73	(Standards and Guideline: 5, News: 4, Lobbying responses on standards and guidelines: 60 [#] , Reports: 4)
CEBS	60	(Standards and Guideline: 5, News and Other: 55)
Total	185	

[&] 38 Lobbying Responses on 2011 consultation on internal audit function (Regulators: 1, Normalizers: 8, Banks: 8, interest organizations: 15, Consultants: 6)

[#]32 Lobbying Responses on Risk Appetite consultation in 2013 (Regulators: 0, Normalizers: 3, Banks: 1, interest organizations: 22, Consultants: 6); 28 Lobbying Responses on Risk culture consultation in 2013 (Regulators: 4, Normalizers: 3, Banks: 3, interest organizations: 13, Consultants: 5)

Table 2.b.: Documents on Normalizers

Actors	No. of Documents	Comments
IIA	21	14 Public (Reports: 8, Survey:1, Webpages:3, Standards:2) and 7 Private (Reports: 4, Survey: 2, Workshop Power Point:1)
IRM	6	3 Public Reports 3 Public webpages
COSO	20	17 Public reports, 2 Public webpages, 1 Public power point
Total	47	

Table 2.c.: Documents on Consultants and Implementers

Actors	No. of Documents	Comments
Consultants		
Deloitte	17	(16 public reports; 1 privately shared)
E&Y	12	(10 public reports; 2 Private shared by IIA)
KPMG	16	(16 public reports)
Protiviti	3	(2 public reports, 1 privately shared)
PwC	10	(9 public reports, 1 privately shared)
Total	58	(53 publicly available and 5 privately shared)
Implementers		
	5	(3 Public ; 2 Private - 1 shared by IIA and 1 by the Implementer)

Table 3: Constructs

Empirical Language	Theoretical Meaning	Theoretical Construct
Making Object of Audit Visible and Auditable		
What is included	Demarcation of things inside or outside (A. Abbott 1995; Bowker and Star 1996)	Boundaries
What is not included		
Areas of concern	Qualitative assessment (Callon and Law 2005; Callon and Muniesa 2005; Cochoy 2008)	Calculation
Index and metrics	Quantitative assessment and counting (Power 2004)	
Quantitative Data: Recorded and calculated metrics	concrete tasks and routines which allow IA to collect information (Power 1999)	Techniques
Qualitative Field study: Interview, survey, questionnaire		
Documental evidence: steering, management system and process document		
Broad Goals of IA		
Objective, purpose or aim of IA of risk culture either spoken or found in documents	Rationale (Power 1999)	broad goals

Table 4: Different risk culture audit approaches

Actors	Standard Setters		Normalizers		Consultants		Implementers	
Elements								
Making object of audit visible and auditable								
Demarcating Boundaries of Audit	Not Calculable, secondary systems of risk governance and risk appetite	Fully Use systems of risk appetite	Not Calculable, Mélange of appetite, governance new system	Fully risk and	Not Calculable, “Branded” systems involving risk appetite and governance	Fully new and	Not Calculable, secondary systems of risk governance and risk appetite	Fully Use systems of risk appetite
Calculation /Qual-culation	Areas qualitative and quantitative assessment –	for and	Areas qualitative and quantitative assessment	for and	Areas qualitative and quantitative assessment	for and	Areas qualitative and quantitative assessment –	for and
Techniques	Existing		new tools of behavior measurement and employee empowerment and training		new tools of behavior measurement and employee empowerment and training		Existing	
Broad Goals for IA of Risk culture	Control and Governance through third line of defense		Control and Governance through third line of defense, Empowerment and Training of employees (first line of defense)		Control and Governance through third line of defense, Empowerment and Training of employees (first line of defense)		Control and Governance through third line of defense, Compliance	
Intentions	New Checks and Balances		Thought Leadership		Monetizing Solutions	New	Status quo to avoid investment	

Paper IV



Unfolding the Basel Internal Audit Practices in International Financial Organizations

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Abstract

Normative and regulative prescriptions present the utopia of independence and objectivity in IA work as governance of other control functions. However, emerging field studies contradict this utopia by raising doubts on the independence and objectivity of IA work in practice. Most of such literature depicts IA members with the full agency by highlighting control over their choices. Some emerging research has started highlighted institutional embeddedness of agency of IA work where institutional prescriptions along with the agency of IA members determines IA practices. Based on three comparative cases, we clarify the nature of agency in IA work by focusing on the availability of institutional prescriptions to IA members due to different internal organizational conditions. Our results provide a theoretical understanding of IA work that has a potential to reconcile our fragmented understandings on how different organizational conditions along with multiple institutional demands lead to compromises on the independence and objectivity of IA work as governance of other control functions.

Keywords: Internal auditing, Basel audits, Agency, Institutional logics,

Introduction

The normative and regulative prescriptions on internal auditing (IA) epitomize the independence and objectivity of the IA functions (IAF) as the third line of defense (Spira and Page 2003, Collier and Zaman 2005, IIA 2009, Roussy and Brivot 2016). As the third line of defense, IA is supposed to work as a governance function independently reporting to the board (Mihret 2014, Parker and Johnson 2017). In contrast to the normative and regulative ideals, a number of field-studies are challenging the objectivity and independence of IA in practice (Christopher *et al.* 2009, Roussy 2015, Roussy and Rodrigue 2016, Christopher 2018). These field-studies implicitly highlight the agency of IA team members to explicate the compromise on the independence and objectivity of IA work. Consequently, IA team members are shown to side with the line managers and to indulge in impression management approaches while reporting to the

board (Sarens *et al.* 2009, Roussy and Rodrigue 2016). Furthermore, IA team members are shown to be deliberately compromising their objectivity and independence in exchange for seeking information from the line functions with ease (Fanning and David Piercey 2014). While focusing on the deliberate agency, this stream of research underplays the fact that IA work is embedded in a complex institutional context where the nature of agency of IA members cannot be explained without paying attention to the varying institutional demands.

An emerging stream of IA literature has started exploring the agency of IA work and its embeddedness in multiple institutional demands (Arena and Jeppesen 2015). Articles in this stream have investigated the compromise on the objectivity and independence of IAF as a role-conflict between being a watchdog appointed by the board or a value-added helper to the line functions (Roussy 2013, Mihret 2014, Ferry *et al.* 2017). The role-conflict is shown to be promoted by the dual role assignments (Roussy 2013, Mihret 2014), ambiguity (Arena and Jeppesen 2015), and contrasting demands on the IAF by the complex institutional setup under which IAF works (Roussy 2015, Roussy and Brivot 2016). However, in unison with the growing organizational literature on embedded agency, till now, this stream of research has paid scant attention to the nature of agency of IA, i.e., when IA team members work as independent agents and when they work as institutional dopes (Binder 2007, Hallett 2010, Smets and Jarzabkowski 2013, Martin *et al.* 2017).

Thus, the theoretical motivation for our paper stems from our desire to put light on the nature of agency in the IA work, considering multiple and contradictory institutional demands under which IA work is carried out (Roussy and Brivot 2016). We argue that understanding the agency work of IA could help organizations and scholars

in understanding how to configure IA teams for better and effective governance approaches.

Besides the theoretical motivation expressed above, the empirical motivation for our research stems from three important empirical considerations. First, while IA expansions in various domains of organizational life are documented, we know little about the growing involvement of IA in other control functions such as risk management. Standard setters and regulators have conceptualized such governance of control function by IA as the third line of defense (de Zwaan et al. 2011, Roussy and Rodrigue 2016). Our hunch is that understanding IA of risk models and processes could contribute to the literature dealing with the effectiveness of IA as a third line of defense. Second, unlike risk management in non-financial industries and public sector, banking risk management practices tend to be quantitative and regulation driven (Wahlström 2006, Mikes 2009, 2011). Thus, quantitative nature and regulation driven context could help us understand how boundaries of IA are expanded to meet demands of different domains. Third, while there are studies from IA in the public-sector domain or non-financial domain casting doubts on the independence and objectivity of IA functions (Christopher et al. 2009, Neu et al. 2013, Roussy 2015, Roussy and Rodrigue 2016); the independence and objectivity of IA functions in the banking domain is coercively enshrined and reinforced by the banking regulations (cf. the BCBS guidelines on corporate governance, 2015; the BCBS guidelines on IA, 2012; The EBA guidelines on Internal Governance GL44, 2011; the Capital Requirement Directive IV, 2013). Considering the tighter regulation on independence and objectivity of IA, banking based studies on IA could add to our understanding of the non-independence and non-objectivity of IA functions.

To unravel the nature of agency in the IA work, we relied on a growing body of research on actor responses to institutional complexity (cf. Binder, 2007; McPherson and Sauder, 2013; Palermo et al., 2016; Smets et al., 2015). The idea of institutional complexity that actors are embedded in contradictory institutional demands fits well with the Basel-IA work. As shown by Arena and Jeppesen (2015), the institutional complexity originates because there are differing normative, coercive and organizational demands on the IA work. Furthermore, as shown by Palermo et al. (2016) and Baud and Chiapello (2016), Basel based risk management in the banking sector itself works under an institutionally complex environment. Considering this multiplicity and plurality of institutions, we first examined the institutionally complex environment under which IA on risk management activities in banks operate. After establishing institutional complexity, we focused on internal organizational conditions (Besharov and Smith 2014, Martin et al. 2017) that mediate availability of institutional logics to lower-level actors and trigger different types of agency (cf. Emirbayer and Mische, 1998; Smets and Jarzabkowski, 2013). In doing so, we specifically focused on understanding two central research questions- 1) how internal organizational conditions constrain IA work by forcing IA teams to indulge in the iterative and passive agency. 2) how internal organizational conditions provide leeway to IA teams by enabling their active agency: evaluative and projective.

To carry out our study empirically, we examined the work practices of the three specialized IA teams at the three multinational European banks which were dealing with the IA of the Basel risk models and processes¹. Considering the institutional embeddedness of IA work, we also explored the multiple institutional demands on IA

¹ Hereafter referred to as the Basel-IA teams

processes by relying on the previous literature, interviews, and archival documents.

Here, we explicitly focused on the views from the dominant normalizers² and regulators³ that affected the IA work on risk management prominently in our case.

Our research has two important contributions. First, we contribute to the understanding of IA work on risk management as a “governance of control” function as opposed to governance function. This contribution has implications for the objectivity and independence of IA work in discharging its role as the third line of defense (Neu et al. 2013, Roussy 2015, Roussy and Rodrigue 2016). Second, we contribute to an understanding of the understudied quotidian IA work by categorizing it in two types (Roussy 2013, 2015, Mihret 2014, Ferry et al. 2017). First, localized practices that enable evaluative and projective agency allowing low-level actors in combining the different logics available to them. Evaluative and projective agency becomes active since there is more discretion available to actors in choosing their practices due to multiple institutional demands passed to them by the internal organizational conditions. Second, globalized practices that emerge due to the iterative agency and restrict the choices of the lower-level actors to the institutional prescriptions. Iterative agency arises when internal organizational conditions constrain the availability of institutional logics to lower level actors. In so doing, we demonstrate how different types of agencies are simultaneously active in the lower-level of organizations in responding to and

² The Institute Internal Auditors (IIA), and the Committee of Sponsoring Organizations of the Treadway Commission (COSO) as indicated in the extant literature (cf. Hayne and Free 2014, Roussy and Brivot 2016, Parker and Johnson 2017)

³ The Basel Committee on Banking Supervision (BCBS) and the European Banking Authority (EBA) since our banks were headquartered in the European Union (cf. Wahlström 2006, 2009, Baud and Chiapello 2016).

reconciling complex institutional demands (cf. Emirbayer and Mische, 1998; Smets et al., 2015).

The rest of the paper is organized in the following manner. The following section problematizes the existing institutional literature (including specific studies on IA) and outlines the research framework. The third section details on the data collection and analysis, followed by the fourth section on the institutionally complex space of IA on risk management in the banking domain. In the fifth section, the cases are presented. Finally, the paper concludes with the discussion and implications.

Institutional complexity: Settlement of multiple logics and nature of agency

Modern organizational work is influenced by multiple institutional logics⁴ which scholars dub as institutional multiplicity (Kraatz and Block 2008, Greenwood et al. 2010) or institutional complexity (Greenwood et al. 2011, Thornton et al. 2012). The institutional complexity requires actors and organizations to balance demands arising from various institutional logics (Pache and Santos 2010, 2013, Besharov and Smith 2014, Schildt and Perkmann 2017). However, how actors and organizations respond to competing Institutional demands is a controversial area in the neo-institutional sociology (Meyer and Rowan 1977, Friedland and Alford 1991, Oliver 1991, Jeppesen 2010, Martin et al. 2017). The controversy in this literature stream could be mainly categorized into two categories: the coexistence or settlement of multiple logics and conception of agency (Lounsbury 2008, Thornton and Ocasio 2008, Kilfoyle and Richardson 2011, Thornton et al. 2012). In this section, we first problematize the coexistence and settlement of multiple logics followed by the nature of agency.

⁴ Institutional logics are socially constructed symbols as well as material practices including assumptions, values, and beliefs, by which individuals and organizations provide meaning to their daily activity, organize time and space, and reproduce their lives and experiences (Thornton and Ocasio 2008).

Problematizing settlement of multiple logics

A lot of traditional research within the institutional logic framework has relied on creation, maintenance, emergence, or challenge to a dominant institutional logic. These researchers have treated the presence of institutional complexity as a temporal phenomenon where it exists only in the unstable transition phase (Thornton and Ocasio 2008, Thornton et al. 2012). This thinking dubs the incoherent, incompatible and contradictory nature of multiple logics in the temporal transition phase as harmful for organizations and argues that organizations work to eliminate such harmful contradictions (Thornton and Ocasio 2008, Thornton et al. 2012). Consequently, this approach posits a story where the domination of one institutional logic emerges after an epoch of instability (Schildt and Perkmann 2017). For example, in the realm of IA practices, scholars have shown IA practice variation arising due to the domination of one institutional logic or the other (Arena et al. 2006).

In contrast, an emerging stream of literature points towards an unsettled institutional field where multiple logics sustain their influence on the behavior of actors (Pache and Santos 2010, Greenwood et al. 2011, Busco et al. 2017). Recent advances in this stream have especially promoted the approach where organizations do not settle conflicting institutional demand by choosing a dominant logic but sustain and harness the coexistence and interaction of competing logics to their advantage (Pache and Santos 2010, 2013). In so doing, scholars argue that the incoherence of multiple institutional logics helps in engendering “appropriate” tensions (Pache and Santos 2010, 2013). Scholars in this stream have shown that “appropriate” tensions work as necessary devils where they beneficially influence behaviors of employees by promoting freedom of thought and action, along with critical thinking and healthy competition that engender innovations (Kraatz and Block 2008, Busco et al. 2017).

Problematizing agency

In this section, we problematize the agency concerns by segmenting the literature on hybrid logic maintenance into three categories (macro, micro, and macro-micro focused) and discuss them briefly. The first stream of studies explains sustenance of hybrid logic by relying on the predominance of legitimacy concerns arising out of macro and structural conditions (Suddaby et al. 2017). Thus, this stream of literature ignores freedom of agency, where individuals do not choose freely from the logic-based prescriptions from multiple available logics (Meyer and Rowan 1977, Thornton and Ocasio 2008, Thornton et al. 2012). Here, two sub-streams take two differing approaches. The first sub-stream relies on the legitimacy based response as a prime concern where different actor-groups within organizations respond to legitimacy concern of different institutional logics (Friedland and Alford 1991, Lounsbury 2001, 2008, Thornton and Ocasio 2008). Another mechanism scholars frequently use in this literature focuses on reconciling the legitimacy concern of contradictory institutional logics by separating the routines and practices catering to the different legitimacy concerns (Pache and Santos 2010, 2013). Sometimes flexible practices such as accounting are depicted as the mediators that reconcile the legitimacy concern of different institutional logics (Busco et al. 2017). Schildt and Perkmann (2017) combine explanations of this sub-stream on varying organizational responses to multiple and complex institutional setups as organizational settlements. They theorize that organizational settlements are approaches where either separate actor groups or practices within organizations address different legitimacy concerns arising from different institutional logics (Schildt and Perkmann 2017, Suddaby et al. 2017). One of the problems with this approach is unclear explanations on who drives organizational settlements.

The second sub-stream of macro-level studies explains sustenance of hybrid logics by highlighting the varying configurations of the macro-level conditions by conceptualizing institutional-fields as mediators of multiple institutional logics (Zietsma et al. 2017). Scholars argue that different configuration of institutional logics in institutional fields may exist that can influence actor behavior (Zietsma et al. 2017). Many scholars refer to such arrangements of contradictory and complementary institutional logics as constellations of institutional logics (Reay and Hinings 2009, Goodrick and Reay 2011, Boch Waldorff et al. 2013). Again, actors and organizations are depicted as passive agents who merely respond to legitimate prescriptions of different institutional constellations (Reay and Hinings 2009, Goodrick and Reay 2011, Boch Waldorff et al. 2013). One of the problems with the constellation approach is unclear explanations on what and who drives constellation of logic in the institutional fields.

In contrast to the institutional and structural focus of macro-level studies, the micro-level studies focus on enactment of logics by actors in two ways: first as institutional work and second as “inhabited” institutional actors. The institutional work depicts institutional entrepreneurs as having full agency and mostly explores work of senior managers, executives and influential teams. Thus, these studies ascertain the agency work of actors as heroic institutional work where actors change institutions through their agency (Boxenbaum and Battilana 2005, Battilana et al. 2009, Smets and Jarzabkowski 2013). The “inhabited” institutional actors approach, in contrast, explores the everyday work including quotidian interactions of low-level actors in institutionalized fields (Binder 2007, Hallett 2010, Everitt 2013, McPherson and Sauder 2013). These studies show the variegated nature of agency in sense-making and interpretation of institutional logics in the circadian work of low-level actors (Binder

2007, Barley 2008). The scholars specifically describe the variegated agencies demonstrating that not all actors are involved with creating and altering institutions but are interested in finding ways to cope with institutional complexity, power conundrums, and prescriptions to forge a legitimate path (Smets et al. 2015).

In the field of IA, Hayne & Free (2014) show heroic institutional work by the COSO which resulted in changing the traditional notions of IA and bringing it to the domain of risk management. Arena and Jeppesen (2015) used “inhabited” institutional approach to demonstrate how beliefs and agency of actors played a role in enacting different practices of IA in different public sector organizations. With some exclusions, many of studies utilizing institutional work or inhabited institutions focus on single organizational units (see for details: Martin et al. 2017). Thus, these studies fail to reveal organizational-level contingencies that could be highlighted in a comparative case-study approach (Martin et al. 2017). Many of these studies also tend to ascertain autonomy of individuals and agency, without a proper explanation and do not fully exploit the structural influence of institutions on individuals (Kilfoyle and Richardson 2011, Martin et al. 2017).

In summary, while macro institutional level studies use institutional understanding, the micro level studies examine practices in detail and real-life environments. In so doing, while macro-level studies glorify structure, micro-level studies eulogize agency by either heroic institutional entrepreneurs or brave and “thinking” low-level actors (Besharov and Smith 2014, Martin et al. 2017). Consequently, we argue that there is a dire need to understand the appropriate level of agency in both micro as well as macro-focused studies (cf. Emirbayer and Mische 1998, Smets and Jarzabkowski 2013, Besharov and Smith 2014, Martin et al. 2017).

The third and emerging stream of studies focusing on macro-micro combine addresses the appropriate level of the agency by combining the features of the macro as well as micro studies. Here, scholars put the focus on internal organizational conditions apart from the arrangement of institutional logics (Battilana and Lee 2014, Besharov and Smith 2014). To explain the appropriate level of agency, scholars in this stream rely on the availability of institutional arrangements to low-level actors by focusing on internal organizational conditions (specific structures such as boards guiding strategy, or specific units filtering institutional logics, or hiring and skilling approaches) (Besharov and Smith 2014, Martin et al. 2017). For example, boards governing strategy within organizations could provide different institutional logic available to different departments or subunits, thereby specifying freedom to personnel within a certain degree of specific institutional logic references (Battilana and Lee 2014). Specific organizational structures could be enacted to deal with new institutional logic. For example, to deal with business logic in healthcare, corporate units could be established to enable profit based business logic to flourish at the same time constraining the professional logic of care of professionals (Busco et al. 2017). Staff with several institutional affiliations could be deputed to help reduce incompatibility and increase the autonomy of actions where these staffs can find a middle ground between different logics (Brandl and Bullinger 2017, Martin et al. 2017). However, the enactment of structures always produces some tension and could still allow one type of logic carrier to flourish over the other type of logic (Battilana and Lee 2014, Busco et al. 2017). For example, doctors with the professional logic of care could flourish against profiteering logic or vice versa (Busco et al. 2017, Martin et al. 2017). However, what is contradictory in this third research stream is the interaction of field-based logic and internal organizational conditions (Martin et al. 2017).

Balancing agency and institutional logics

We focus on the link between the availability of institutional logics to low-level actors due to organizational conditions and the agency-type literature stream. In so doing, we make two assumptions. First, actors and organizations are embedded in the multiple institutional setups (Yang and Modell 2012, Arena and Jeppesen 2015, Martin et al. 2017). Second, actors work as agents when they have discretion. However, actor discretion is constrained by the way organizational conditions allow institutional logic to reach the lower level actors (Besharov and Smith 2014, Martin et al. 2017). We further argue that constraint on discretion results in the homogeneity since actors have to respond in a certain way. At the same time no constraint on discretion “may” result in a variety of practices depending on how low-level actors exercise their agency (Brandl & Bullinger, 2017; Schildt & Perkmann, 2017). And since prior result has shown that IA practices result in similarity as well as a variation (Arena et al. 2006, Arena and Jeppesen 2015), we argue that our approach of balancing institutions and agency could be a suitable way to explain both the homogeneity and heterogeneity of IA practices. We further justify adopting our approach by arguing that the existing literature has already established the three factors in the IA work (albeit separately) - the complex institutional setup and their competing demands (Arena and Jeppesen 2015, Roussy and Brivot 2016), internal organizational condition (Caplan et al. 2000, Prawitt et al. 2012) and agency (Roussy 2015, Roussy and Rodrigue 2016).

Following Besharov and Smith (2014), Martin et al. (2017), and Schildt and Perkmann (2017), we focus on the three internal organizational conditions that enable and constrain agency. First, Board structure, the structure of IA teams, and their skilling and hiring. All the three conditions mentioned above basically either constrain the availability of logics in different teams and practices or directly pass all available institutional logics to teams and practices (Besharov and Smith 2014, Smets et al.

2015). For example, direct reporting to boards may shield the control teams such as IA and risk management from the business logic of profit-making through risk-exploitation, thereby allowing IA and risk management teams to focus on responding to their professional logic. In contrast, boards may promote business logic of profit making in all units including control functions and thus allow the IA teams to not only cater to the professional logic of IA but also to the profiteering logic of business in carrying out their assurance work (Arena and Jeppesen 2015, Christopher 2018).

Furthermore, specialized IA teams with professional certification of IA could be carriers of the professional logic of IA and may be made more professional and independent in their work (Arena and Jeppesen 2015). Also, less socialized IA teams when they are not permanent structures in the organization and are outsourced could have less influence from the business logic of profit making (Caplan et al. 2000, Prawitt et al. 2012). In contrast, IA teams in organizations where they are rotated to different business units may pick up the dominant logic of the team through socialization and thus could use an agency in ascertaining which institutional logic they are loyal to (Christ et al. 2015).

Availability of multiple institutional logics allows actors discretion in addressing how they respond to different institutional logics by enabling agency. Following Emirbayer and Mische (1998); and Smets and Jarzabkowski (2013), we conceptualize three types of agency: iterative, projective and practical-evaluative. The iterative agency allows actors to reproduce established practices and institutions corresponding to a single institutional logic. This type of agency is past looking or passive and is used when actors do not have the discretion to make choices (Emirbayer and Mische 1998, Smets and Jarzabkowski 2013). In contrast to the iterative agency, the projective agency is forward-looking and allows actors in sensing a change in future institutional demands

on practices (Emirbayer and Mische 1998, Smets and Jarzabkowski 2013). This agency comes into play when actors plan to change practices or institutions themselves (Battilana et al. 2009). The practical-evaluative type of agency is focused on the here and now and allows actors with discretion who have availability of multiple institutional logics or ambiguous institutional prescription to determine their course of action (Emirbayer and Mische 1998, Smets and Jarzabkowski 2013).

Methodology

Selection of cases

This paper is based on case studies (Yin 2003) of three Basel-IA units. The main criteria for the case selection were empirical (Eisenhardt and Graebner 2007): international European financial institutions with large revenue and operations, the presence of quantitative risk model and Basel-IA implementations and willingness to share the details of the Basel-IA processes.

Table 1 shows the main organizational characteristic of the cases selected. For reasons of confidentiality, we use three pseudonyms (Aster, Begonia, and Camellia) in place of the companies' real names.

-----INSERT TABLE 1 HERE-----

Data collection

Primary data sources to understand institutional complexity were semi-structured interviews with external stakeholders (See Table 2 for details). These interviews also enabled contextual understanding of the Basel-IA. The interviews were supplemented with the documents on regulations, norms, and approaches suggested by the external stakeholders and were collected either from the publicly available sources or the informants themselves.

The primary data sources to understand internal organizational factors, contexts, practices, and preferences of the Basel-IA are the semi-structured interviews with the control teams (IA, internal validation, risk management, and compliance) in the three financial institutions. The data sources also comprise the annual reports, pillar III risk reports, corporate governance reports and internal documents (IA manuals/reports/policy) shared by the interviewees.

Internal Basel-IA interviews started at Begonia where we interviewed some informants to get detailed information. This information helped us in making our questionnaire more robust for the latter two cases requiring less number of interviews to achieve saturation of information. Overall, 21 interviews with 19 informants (see Table 2) were conducted during April 2014 to November 2015. Interviews were of 1-2 hours in duration. All interviews were recorded and transcribed, except for three. All internal interviews were conducted at the client locations, enabling for observation notes, an informal chat with participants and some assistants during coffee time. We also tackled informant bias by interviewing at least two or more than two stakeholders of the Basel-IA, asking for clarification on contradictory information, triangulation with available private documents (internal documents shared by the interviewees) or public data. We avoided recall bias by interviewing on current activities (Arena and Jeppesen 2015).

-----INSERT TABLE 2 HERE-----

Data analysis

Data analyses were carried out in three steps: mapping institutional space, within-case analysis, and cross-case analysis. External institutional space of regulations, standards and professional norms were mapped out by literature review as well as by analyzing the interviews of external stakeholders and documents shared by them or publicly available documents. Within-case analysis of individual cases was primarily carried out

by following the two steps mentioned below (Eisenhardt and Graebner 2007). First, the internal organization of corporate governance, Basel-IA team, Basel-IA staffing and skilling approaches (leading to Basel IA teams carrying one logic or multiple logic) were identified as internal organizational conditions that made institutional logic available to low-level IA team members. These internal organizational conditions as well as hiring and skilling are cited in the literature that make institutional logic available to low-level teams (Smets and Jarzabkowski 2013, Besharov and Smith 2014). Second, practices of Basel-IA (emphasis on five practices in accordance with previous research (Roussy 2015, Roussy and Rodrigue 2016) - planning, model audits, process audits, issue handling/reporting, and regulation scanning) within the three cases were examined to ascertain what type of agency actors were utilizing in achieving these quotidian tasks. In so doing, we specially focused on the three different types of agency explained in the proposed framework section (Emirbayer and Mische 1998, Smets and Jarzabkowski 2013). Finally, we performed a cross-case comparison identifying similarities and dis-similarities of organization, practices, and contexts within cases (Eisenhardt and Graebner 2007). Once these similarities and dissimilarities were identified, possible explanations were envisioned trying to dissociate context from general regularities (Eisenhardt and Graebner 2007).

Constellation of Institutional Logics in the IA domain

In this section, we explore the constellation of institutional complexity (arrangement of institutional logics) affecting IA of risk management. Here, we follow the process employed by Boch Waldorff et al. (2013), and Goodrick and Reay (2011) to explore the institutional constellation of the IA work related to the risk management in the banking sector. However, instead of focusing on the institutional logics of state, professional, corporate, community, market, family, and religion; we follow the institutional logics

that have been identified in the IA literature. As informed by the previous IA literature, the constellation of institutional complexity in the domain of IA has been attributed to the presence of three different types of institutional logics (Arena and Jeppesen 2015). First, the professional logic of assurance and consulting, promoted by the guidelines of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and the Institute of Internal Auditors (IIA) (IIA 2009, Hayne and Free 2014, Mihret 2014). Second, the state logic of compliance linked to the government laws (Spira and Page 2003, Brown et al. 2014) and mandatory guidelines by the banking regulators (Chambers and Odar 2015). Third, the corporate logic of bureaucracy of IA, linked to the diffusion of IA practices as checklists and verification approaches in organizations (Arena et al. 2006, Bhimani 2009, Arena and Jeppesen 2015). Changes in all the three institutional logics have been linked and promoted by the corporate frauds and failures (Spira and Page 2003, Parker and Johnson 2017).

Professional Logic

The IIA and the COSO, in general, posit IA in the broader context of the corporate governance in their frameworks and professional guidelines. These frameworks and professional guidelines stress on independent, objective, competent and ethical assurance on the quality and effectiveness of the risk and governance processes as the main role of the IA (Gramling et al. 2004, Christopher et al. 2009, Roussy and Brivot 2016). On the issue of the involvement of IA with risk management, the IIA, and the COSO promote two⁵ normative demands on the IA function – core IA practices

⁵ The IIA restricts internal auditors to play a direct role in risk management such as setting the risk appetite, imposing risk management processes, management assurance on risks, taking decision on risk responses, implementing risk responses on management behalf's and accountability for risk management (IIA, 2009).

(assurance), and legitimate IA practices (consulting) (IIA 2009, Roussy 2013, Mihret 2014, Ferry et al. 2017). The core practices relate to assurance and involve following activities: evaluating management and reporting of key risks and risk management processes along with assuring correct evaluation of risk and the risk management processes. Regarding practices, this role requires verifying risk-appetite definition and steering documents of risk processes approved by the board along with their communication to the low-level employees. The legitimate consulting practices include following activities: championing establishment of the risk management framework, maintaining and development of the risk management framework and coordination of the activities. In practice, these activities mean being helpful to managers and not being just the watchdog of the audit committees and the board (Roussy 2013, Mihret 2014, Ferry et al. 2017). The legitimate consulting practices also include activities such as facilitating identification and evaluation of risks, developing risk management strategy for board approval, consolidated reporting on risks and coaching of management staff in responding to risks (IIA, 2009).

Regulatory Logic

The state logic of IA also promotes the changes in the IA approaches, reflected especially in laws and standards from the governments and the banking regulators respectively (Chambers 2014, Chambers and Odar 2015). Governments across the globe have enacted IA as a governance mechanism by commissioning different reports and committees and institutionalizing the changes either through fortifying or extending existing legislation (many of which are also based on the IIA guidelines) (Spira and Page 2003, Brown et al. 2014). In this regard, the governments have adopted two different approaches: Mandatory and non-mandatory. The mandatory approach emphasizes on following standards (such as the Sarbanes-Oxley Act in the USA, and

the European Union 8th company law directive). The non-mandatory approaches give some leeway to companies by their “comply or explain” approach such as in the UK (Brown et al. 2014). In our case, only comply and explain approaches were applicable. In the Italian cases, Preda reform 1998, Draghi code {1999 and 2002}, and reformed company law 2004 in Italy (Arena et al. 2006, Arena and Jeppesen 2015) and in Sweden the new corporate governance codes {2008, 2010, 2015} (The Swedish Corporate Governance Board, 2015) substantiate the approach of complying and explain.

In our analysis, we find that the Basel Committee on Banking Supervision (BCBS) and the European Banking Authority (EBA) also posit IA in the broader context of the corporate governance by reiterating broad principles. As identified by previous research (cf. Collier and Zaman, 2005), the regulators stress on independent, objective, competent and ethical assurance on the quality and effectiveness of the risk and governance processes as the main role of the IA (cf. the BCBS guidelines on corporate governance, 2015; the BCBS guidelines on IA, 2012; The EBA guidelines on Internal Governance GL44, 2011; the Capital Requirement Directive IV, 2013). Regulators, here, also promote and refer to the international standards set up by the COSO and promoted by the IIA (the BCBS guidelines on corporate governance, 2015; the BCBS guidelines on IA, 2012; The EBA guidelines on Internal Governance GL44, 2011; the Capital Requirement Directive-CRD IV, 2013). Thus, regulatory guidelines do not contradict the COSO framework but extend the ambit of the assurance type activities more prominently than the consulting type activities (Chambers 2014). For example, since unlike other industries, banks have quantitative models, The EBA and BCBS standards require banks to have a separate validation team under risk management. Also, the assurance of this validation team-work is entrusted to the IA

teams. However, these guidelines also add IA reporting and compliance with the banking supervisors as an important aspect (Chambers 2014).

Corporate Logic

While institutionalization took place through normative and coercive demands, It was reflected in the IA practices through changing internal roles and demands within organizations (Chambers and Odar 2015). Scholars trace the existence of modern IA practices to 1900 when mid-level managers used IA as a checkpoint by re-performance of certain accounting processes (Chambers and Odar 2015). By 1940, IA has become an assurance provider for internal accounting control and all operational processes since organizations had become complex and volume of recorded transactions had grown making mere re-performance futile (Castanheira et al. 2009, Chambers and Odar 2015, Parker and Johnson 2017). 1980 started an era of risk-based IA entrusting risk assurance function to IA (de Zwaan et al. 2011, Hayne and Free 2014, Chambers and Odar 2015, Parker and Johnson 2017). This involvement of IA in risk assurance is attributed to three factors: the rise of the complexity of businesses (Chambers and Odar 2015), rising importance of risk through advanced computing technologies and fee reduction pressure on external auditors forcing them to rely on extensive IA work (Power 2000, Spira and Page 2003). Grounded in history, IA has been positioned as a bureaucratic logic (the corporate logic of IA) on the quality of risk management (Spira and Page 2003, Castanheira et al. 2009, de Zwaan et al. 2011, Hayne and Free 2014, Chambers and Odar 2015). This bureaucracy is reflected in “mythical” procedures of IA that have failed to serve its purpose of being independent and objective (Christopher et al. 2009, Arena and Jeppesen 2015, Roussy 2015, Roussy and Rodrigue 2016).

The Corporate Logic of Banking and Different Logics of IA

Basel Risk modeling and processes are directly linked to the strategy of banks (Wahlström 2006, 2009, Baud and Chiapello 2016). In fact, by facilitating exploitation of risks, the Basel risk models and processes facilitate profit and value creation for the banking stakeholders (de Goede 2004). Thus, in the business of banking, the corporate logic of banks is directly linked to the logic of risk exploitation (de Goede 2004, Palermo et al. 2016). This logic of risk exploitation is grounded in innovation and entrepreneurialism that guide the banks to explore new avenues of risk-taking (de Goede 2004, Palermo et al. 2016).

We argue that the professional logic of assurance and the regulatory logic of compliance require IA practices to assure to internal as well as external stakeholders on the appropriate level of exploitation of risk, thereby hindering the risk exploitation activities of the banks. In contrast, the professional logic of consulting allows IA practices to help mitigate the identified gaps and problems in the risk-taking approaches, thereby enabling and facilitating risk exploitation. The bureaucratic logic of IA that hampers the independence and objectivity of IA work in assuring the appropriate level of risk-taking also facilitates risk exploitation. Consequently, by relying on the constellation framework developed by Boch Waldorff et al. (2013), and Goodrick and Reay (2011), we argue that the professional logic of assurance and the regulatory logic of compliance of IA are contradictory to the logic of risk exploitation. In contrast, the professional logic of consulting and corporate logic of bureaucracy of IA are compatible with the logic of risk exploitation.

Case Results

This section presents the three cases (Aster, Begonia, and Camellia) by highlighting the context, internal organizational conditions (Corporate governance model and

arrangement, Basel-IA team organization and skilling) that make different logics available or unavailable to low-level actors, and different types of agencies involved in the Basel-IA practices.

Basel-IA at Aster

Aster is a large international bank with revenues of more than five billion Euros and operations in more than ten countries in Europe, Africa, Asia, and North America. Its operations include retail and commercial banking, as well as investment and asset management. In the last decade, the company grew by merger and acquisitions (M&A), leading to its operations as several regional brands in different geographical areas. Concerning risk management, Aster utilizes advanced risk models, particularly in the area of credit, and operational risk; with an aim to free more capital for business. However, some geographical operations also own basic risk models. Risk models are deployed through tightly integrated IT applications and operational procedures.

Internal Organizational conditions

Aster changed its corporate governance model in 2014 to comply with the home country's legislation adopting the European legislation (CRD IV) on the harmonization of corporate governance across Europe. These regulations promoted tighter supervision of credit institutions apart from harmonization of supervisory provisions, affecting roles, responsibilities, and composition of the corporate bodies. As a result, Aster has adjusted its indirect corporate-governance model, where shareholders elect the supervisory board, and supervisory board elects the management board. The supervisory board now has five consolidated committees, comprising 3-5 members each, to govern different areas: risk committee (merged with control, strategy and financial statement committee recently), internal control committee (also assumed

compliance committee's responsibility), nomination committee, remuneration committee and third-party transaction monitoring committee.

Regarding top management, the Chief Executive Officer, assisted by six executives in charge of risk, lending, innovation, operations, finance, and governance, directly reports to the management board. The executives are supported by six independent staff units and heads on administrative and tax, regulatory-affairs, safety-protection, external relations and project coordination, and IA. The head of IA reports directly to the internal control committee and the management board. This setup of the board and top management team ensures the separation and independence of the IA activities at the highest level by the regulatory and normative demand (Gramling *et al.* 2004, Collier and Zaman 2005).

Focusing more specifically on the Basel-IA, Aster has a centralized team supporting different regional teams. The Basel-IA team was first established in 2004 – 05 as a separate central department. After several M&A operations that took place in 2008-09, the Basel-IA was incorporated within the central staff unit when the bank got approval for its first advanced credit risk model. The Basel-IA team currently comprises eight internal auditors, headed by a senior manager who reports to the IA head. To ensure that the Basel-IA auditors possess sufficient mix of quantitative, process and IA knowledge, the bank recruits experts with educational backgrounds in econometrics, process knowledge, and IA certifications. The Basel auditors are promoted to have data-mining and statistical skills since the banks own quantitative models. Aster also promotes competence development through IIA certifications for non-certified IAs. On-job training is preferred instead of rotation to other departments to improve process knowledge. Thus, Basel-IA works in Aster is configured in such a way that the low-level auditors have access to the professional logic of IA (assurance and consulting).

This availability of professional logic is grounded in the skilling and certification initiatives that make IA team members familiar with the normative professional guidelines laid out by the IIA and the COSO (Arena and Jeppesen 2015). Furthermore, since there is no rotation policy for the IA team members, they do not have access to the business logic of risk-exploitation.

The corporate logic of IA (bureaucracy) is mainly dealt with at the head office in the methodology development team and other staff functions. Consequently, the IA methodology team owns methodology documentation and charters of all IA activities, including the Basel-IA. Sometimes the IA methodology team collaborates with various specialized IA teams, such as the Basel-IA to develop the actual methodology. The methodology team also owns an audit skill inventory and tracks changes required in the skill level of auditors. Furthermore, to shield lower-level actors from the corporate logic of bureaucracy, the reports and audit plans prepared by the lower level actors are consolidated at the higher-level and only shared between the IA and the risk management managers. The whole IA team is also separated from the business logic of risk exploitation and works independently of other business units (such as bank branches) where profit making and risk-taking are promoted. This work and functional segregation constrain the availability of the corporate logic of IA to the Basel-IA team (cf. (Reay and Hinings 2009, Pache and Santos 2010, 2013, Greenwood *et al.* 2011, Martin *et al.* 2017))

Since regulatory changes affect the Basel-IA skill requirement, the Basel-IA team is entrusted to track the relevant regulations on its own.

In this case, it's my office that follows the evolution of the external regulation such as Basel. From time to time, we can decide to organize specific training for the other colleague of internal audit department where the main objective is to share

with them the new regulation - the impact of the new regulation on our ordinary activity. (Informant 8)

The statement above highlights that the regulatory logic of IA (compliance) is also accessible to the Basel-IA team members.

Agency in the Basel-IA work

In the case of Aster, the Basel-IA team members have access to the professional logic of IA (consulting and assurance) as well as the regulatory logic of compliance. To carry out the professional logic of assurance and consulting and the regulatory logic of compliance, the Basel-IA team at Aster carries them mostly under different practice sets (Smets *et al.* 2015).

The Basel-IA planning is dependent on the process and template catering to the corporate logic of IA, which is set at the head office level (Besharov and Smith 2014, Martin *et al.* 2017). Hence, most of the Basel-IA planning work shows a predominance of iterative agency at the lower-level of actors. This iterative agency is guided by the audit charter which is maintained by the central IA methodology team. The audit charter lays the principles for guiding the overall planning process for IA, formalized as the overall IA plan. The audit charter also contains high-level role, purpose, objective, authority, responsibility, planning, quality assurance, improvement and organizing approaches of the IA functions. Only the supervisory board can approve any changes to the audit charter. The overall IA plan is a multi-year plan, modified and approved on a yearly basis. Planning follows a bottom-up approach where all IA teams, including the Basel-IA, submit their plans to the methodology reporting team for consolidation. Thus, the content of the plans are left to the practical-evaluative agency of lower-level actors:

Each office makes their [own] internal audit plans. We have the methodology office that collects these audit plans at the office level and prepares the audit plan of the [whole internal audit] department. (Informant 9)

The central Basel-IA team, in collaboration with the members at different geographies and units, prepares the Basel-IA plan. The Basel-IA plan is linked to the general IA plan. It is a risk-based plan and is developed in collaboration with the risk management teams. The report of the internal validation team is the starting point for building the preliminary plan of the Basel-IA team.

For the audit problem (...) [to] define the audit activity (...), you have to understand the models. And we also need to see the first empirical analysis, and usually, the first empirical analysis that we see is an analysis of internal validation because they perform a periodical back-testing on or before the model deployment- the internal validation analysis that they call a pre-validation analysis. In this case, it helps us to have an idea of how the models work. (Informant 8)

Assurance is conducted on existing as well as on newly developed risk models. The Basel-IA assurance processes on a broad level are functionality driven and have been in place for a decade at Aster. The focus of the assurance work is also on being prudential for the regulators as well as for the bank. Assurance work thus also ensures compliance with the coercive regulatory requirement. Since regulatory logic of compliance and professional logic of assurance are compatible in nature, most of this work is repetitive in nature and is attributed to the iterative and past looking agency following the broad guidelines of the professional logic as well as the regulative logic of compliance in the separate practices of verification (Smets *et al.* 2015). For example, as per the regulative logic of compliance along with the models, the Basel-IA team also assures the internal-validation approaches. As per the professional logic of assurance

risk management related process, such as the definition of risk-appetite, process related steering documents are also verified.

Above all, on the model, we ask the main question ... [is] this model (...) prudential or not (both for the bank and the regulators). The process is prudential or not. Is in line with the risk profile of the portfolio of the bank, yes or not. This is the main question that the internal audit department has to answer. (Informant 9)

The evaluation of risk models and processes is carried out by a practical-evaluative agency especially the work focusing on the quotidian tasks and decision making.

Consequently, Different types and complexity of models determine the prioritization of activities. The model audit is carried out through quantitative as well as qualitative approach. Thus, functional analysis, calibration, architecture, stability and discriminatory power of the models are considered important for auditing. Backtesting of model results is used to validate the appropriateness of new models Vis a Vis existing models. Furthermore, simulation, scenario, and sensitivity analysis are also used to test compliance with correct interpretation. A rigorous quantitative validation approach is applied for testing of credit risk models, such as Loss Given Default and Probability Default models of credit risk as well as operational risk models. Thus, there is a kind of quantitative enthusiasm for model testing (Mikes 2009, 2011), where statistical validation of models drives the model IA work. The basis of this quantitative enthusiasm lies in a historical context: since the current Basel-IA team carried out internal-validation before 2006 (hence, before the regulation of the supervisory authority asking for a separate internal-validation report on models, with a similar approach).

In my department we decided to cover these topics with a quantitative, I can say, with a more quantitative approach than other (...) banks. Means that we perform an activity similar to internal validation. (Informant 8)

The qualitative approach of interviewing people is applied to carry out process audits on credit and operational risk. The process audit runs with a practical-evaluative agency where the auditors decide quotidian details of interviewing. The practical-evaluative agency here results due to normative and regulatory flexibility. For process audits, the Basel-IA team works merely as an anchor and coordinator and takes help of other IA teams:

We have three pillars - models, processes and IT. We cover the activity directly on the models because we know the performance of the models. But for the credit or IT process, the task of my office is - we have to coordinate the activity of the other offices of the internal audit on the credit activity or the evaluation of the credit processes and the IT. (Informant 8)

The consulting work requires assisting risk management teams with suggesting mitigating solutions and this work is carried out in three practice sets that each follow one dominant logic. Identification of the problems and solutions are carried out with the professional logic of consulting. Here, the Basel-IA team at Aster uses a practical-evaluative agency to ascertain the identification of discrepancies. This happens because quotidian task of finding what is not working is dependent on the auditors and their evaluative judgement (MacLulich 2003). Also, since the Basel-IA teams in Aster are independent of the business influence (and business logic of risk-taking), we see the Basel-IA team mentioning conflicts on certain issues. Conflicts mainly arise on the management of collateral, and definition of risk-weighted assets.

What exactly is reported and how it is reported on the weakness found during the Basel-IA follows the corporate logic of IA, where processes and approaches are set

by the IA methodology and head office team and follow the IIA guideline of being helpful to the line managers. Therefore, the iterative agency is displayed by the Basel-IA actors. This means that the issues identified and prioritized in reports are carried out at the head office level in collaboration with the central risk management and internal-validation team. The advice of the Basel-IA team on the resolution of the identified problems are also discussed at the head office IA and central risk management and internal validation teams. Consequently, any conflict with risk management and internal-validation teams is discussed before reporting it to the internal control Committee.

Since the IA team uses same formats for reporting to internal as well as external stakeholders the regulatory logic of compliance is mainly taken care by establishing that IA teams do “ritualistically” report on the identified discrepancy and suggest mitigating measures. Again, reporting formats are taken care of by the head office, and thus Basel-IA teams use an iterative agency to follow the template. The internal control committee is appraised and reported quarterly with the Basel-IA reports which are clubbed with one IA-report. The external sharing of reports with regulators and their site visit is carried out on the demand basis. In contrast to established models, audit reports for new models are prepared on ad hoc and need basis for the internal control committee as well as the regulators.

Basel-IA at Begonia

Begonia is a large international bank having operations in more than ten European countries with revenues of more than five billion Euro. Begonia sticks to its main brand name in many countries. Begonia has retail and commercial as well as investment banking arms in several countries. Begonia has integrated and advanced risk models and is in the process of moving to second-generation risk models targeted at freeing more

capital for business. Credit and operational risk models are the focus of the risk modeling team in Begonia. This focus could be explained by the freedom provided by the regulatory regime in formulating advanced risk models for these specific categories of risks allowing more free capital (Wahlström 2006, 2009). Though different geographies have different risk models, the majority of the risk models deployed at Begonia are advanced in nature. Integrated IT applications support the complex risk models and wide geographical operations of Begonia.

Internal Organizational conditions

In 2014, Begonia completed the change process of complying with the European Banking Authority (EBA) directives and guidelines that were aimed at harmonizing the corporate governance guidelines across the European Union. The annual reports, corporate governance reports, and the interviewees identified these three main regulations- the Capital Requirement Directive (CRD IV), the Internal Governance Guidelines (GL 44) and the European Union 8th company law directive especially focusing on the clauses on assessment of the suitability of members of the management body and key function holders. Begonia currently follows a two-tier system of corporate governance, where the first tier contains the board with \geq ten members and comprising three different committees including 3-4 members each: risk & capital, audit & compliance, and nomination & human resource. The second tier consists of executive committees (EC) involving the chief executive and the executives responsible for IA, compliance, and risk. All the executives in the two-tier system report to the board as well as the EC. The board appoints IA and risk executives directly. Since credit quality is an important issue for the bank, the risk head directly supervises the credit quality head. This high-level corporate governance arrangement ensures the independence of

IA functions at the highest level as stipulated in the regulatory and normative guidelines (Gramling *et al.* 2004, Collier and Zaman 2005, Brown *et al.* 2014).

Regarding the Basel-IA, the Basel-IA team is managed centrally from the headquarters and has one responsible person for each geography. The Basel-IA team is a virtual team of 20-30 people headed by one experienced internal auditor having experience with and professional certification in both internal and external audit. The virtual team enrolls different experts from the IA team for the Basel-IA, who apart from their work on other IA processes; work with specific areas of the Basel-IA. This organization of the Basel-IA aligns with the previous experience of the Basel-IA responsible for an international big four external audit firm where she assigned auditing works in the matrix form. The virtual team structure with additional responsibilities of the Basel-IA ensures availability of the corporate logic of IA to the Basel-IA team (Goodrick and Reay 2011, Besharov and Smith 2014).

The internal auditors are recruited in ways where the team has a mix of business process and IA expertise and certifications. Formal IA certifications are promoted once the diverse group of people makes it to the IA team. Regarding skilling, the promotion of certification ensures that the professional logic of IA (assurance and consulting) promoted by the IIA and COSO are available to the Basel-IA actor (Arena and Jeppesen 2015). The IA members are rotated outside IA-units to learn different operational and business skills. There is a strong focus on profit-making and entrepreneurial risk-taking in Begonia. Thus, in contrast to Aster, this rotational configuration of Basel-IA configurations allow business logic of risk-exploitation to reach its low-level actors. This is in line with the previous research on hybrid organizations, where familiarity makes actors carriers of different institutional logic (Lounsbury 2008, Thornton *et al.* 2012, Arena and Jeppesen 2015, Busco *et al.* 2017).

The regulatory logic of IA (compliance) is also accessible to the Basel-IA teams as they are made responsible for reconfiguring their practices according to the changes in the regulations. This is carried out with a projective and future driven agency. As Informant 12 reported:

“We have to meet the regulatory requirements not only from the regulator here in [home country] which is the home regulator and therefore most important but also the regulators in Germany, in the Baltic Countries, etc.”

Agency in the Basel-IA work

As discussed above, the Basel-IA work at Begonia is configured in such a way that low-level auditors have access to the different logics of IA: the professional logic of IA (assurance and consulting), the regulatory logic of IA (compliance), and the corporate logic of IA (bureaucracy). The rotational policy of IA auditors in different teams also ensures that the Basel-IA work has access to the corporate logic of risk-taking. Such accessibility of multiple institutional logics in the case of Begonia, allows Basel-IA to exercise their agency in making a lot of choices in their day-to-day activities. The Basel-IA team at Begonia carries different logics mostly under different practice sets (Smets *et al.* 2015).

The broad template of planning is defined in the IA charter document, requiring low-level IA teams to indulge in the iterative and passive agency to follow the approach and timeline of the plan. Consequently, the Basel-IA plan, which is linked to the general risk-based audit plan, is annual.

There is an annual audit plan that we are starting to work on using risk assessment. It's a risk-based audit plan also incorporating a lot of these regulatory audits. (...)
(Informant 12)

Regarding the quotidian task of planning, there is a leeway given to the Basel-IA actors on defining requirement of resources and experts and deciding on details of the plan. This requires practical-evaluative agency on the part of the Basel-IA actors.

I am responsible for everything globally, but then we have one person responsible for each of the main geographies. So, what we do?- We all three sit together, and we review the kind of Basel work of all the various models and all the various things that we should be auditing, and we also assess kind of impacts on the various locations and impact on the banks as a whole. Then between us, we decide on how will we do the audit and how will we resource the audit. (Informant 13)

The Basel-IA actors also monitor and request changes to the plan using their practical-evaluative agency in the quotidian tasks.

But then of course as you go every course of the audit plan gets reviewed because things do change and sometimes you have other risks coming up, and sometimes something is no longer relevant. Therefore, there is some sort of continuous risk assessment and change to the plan every quarter. (Informant 13)

The assurance of models is carried out throughout the model development and deployment process. The Basel-IA assurance processes are around a decade old and are divided based on the type of risks. The focus is more on credit and operational risk. This practice could be considered a hybrid practice that follows the professional logic of assurance of IA as well as the corporate logic of bureaucracy and the regulatory logic of compliance (Busco *et al.* 2017).

The broad high-level approach of the model audit work is driven by the capital requirement regulation (CRR). The CRR contains the regulatory logic of compliance apart from the business logic of risk-taking where it allows more capital free for the bank, thereby justifying the entrepreneurial risk-taking of line managers by the post-hoc analysis of the control teams such as risk management and IA. Consequently, the broad

high-level approach of the model audit work is a hybrid practice catering both to the regulatory logic of assurance of IA and the business logic of risk-exploitation (Busco *et al.* 2017). Furthermore, while the quotidian assurance work on the model on verifying the documents, data, quantitative backtesting, information technology, and systems seems to be by the professional logic of assurance, the quotidian assurance work of the Basel-IA is influenced by the CRR as well. Thus, overall the assurance task requires Basel auditors to indulge in the iterative agency and passive work catering to the hybrid high-level broad approach. As informed by an informant and emphasized several times during our conversation with various informants:

The CRR requirements become our program, so we go for each item and services. This is how we become compliant while we set a procedure, which is also to check the compliance with regulations. (Informant 13)

Apart from the hybrid practice of model assurance, the three logics are separated on the level of activities as much as possible thus making actors respond to a single logic for the activities iteratively and passively (Smets and Jarzabkowski 2013, Smets *et al.* 2015). For example, the internal validation standards are set internally as a template by catering to the corporate logic of IA. The assurance activities on internal validation approaches satisfy the regulatory logic of compliance.

Generally, the IA assurance is annual in nature. However, the complex models are audited more frequently depending on the size and complexity, thus requiring a practical-evaluative agency on which models to audit frequently:

... Generally, most models will be audited on an annual basis. Then sometimes depending on the complexity and size of the model and impact of the model few models could be audited on a longer cycle. (Informant 14)

The process audit is carried out not only based on documents or data, but also involves fieldwork and requires practical-evaluative agency enabling judgement of auditors (MacLulich 2003).

...But when you test implementation it's more of fieldwork not just looking at a document; you spend time doing that. (Informant 15)

The consulting and internal reporting process revolves around identifying and reporting irregularities and is carried out with the professional logic of consulting. Thus, all the issues, their description, remedy, a timeline of remedy, issue owner and categorization into critical, significant, major and minor are done in consultation with the team where irregularities are found.

The audit report at the end of the audit will go to the auditee as well as who's responsible for the division. (...) we will report pretty much everything, but it will be very thoroughly agreed with the action plan of how it will be fixed. (Informant 13)

Issue report is prepared and reported quarterly to the internal board. Overdue issues are closely monitored.

The external reporting to regulators is carried out with the regulatory logic of compliance and with an iterative and passive agency. Consequently, to prepare regulatory reports in the requested format of the regulators, regulatory audits are conducted separately by the risk management team to ensure compliance, since regulatory checks for the home country regulator require strong quantitative expertise on specific models and processes in accordance with the CRD IV.

To keep regulatory compliance in check in the volatile regulatory environment, Begonia Basel-IA follows international regulations as well as regional and local regulations on IA. Here we see the future and projective agency on display that desires

to keep the practices compliant with the regulatory requirement, rather than a desire to change the institution itself.

We already run routines and procedures that are not supposed to be put into law until 2017 for example because some of them will demand such changes on the bank - how the bank runs certain things - that you cannot fix it in three weeks.
(Informant 12)

Basel-IA at Camellia

Camellia has operations in 14 European countries with revenue exceeding hundred million Euros and employs close to seventy employees. The operations and products of Camellia are not complex though its revenue is large. Camellia is one of the oldest Industrial banks:

So mostly our customers are transportation, distribution firms, and sometimes mining industries. So our activity is quite, let's say, limited and straightforward, focusing on the financing of trucks, buses, trailers (...) and I should mention that we are [one of] the oldest finance house. (Informant 19)

Since Camellia deals mostly with leasing, several of its international operations are not supervised by the banking regulators locally (out of fourteen countries, only six have supervision as a credit intermediary). However, the home country regulator regulates all of its global operations as a credit intermediary.

The risk models are basic models, and risk management is not yet highly integrated and automated. Camellia is currently preparing an inventory of risk models.

We are developing a register of our models that we have within the operation, within the company, to evaluate the model risks that we have. But this is still in the construction phase. (Informant 19)

Camellia is also in the process of improving its operational risk model and management to comply with regulations.

Regarding operational risk, of course, a lot of it had been best practice before, but regarding best regulation, it's more than 70 bits and pieces that we need to have in place. (...) So, there is a lot of resources put into this, to mapping the processes and to mesh with them and find deviations and identify operational risk in this.

(Informant 17)

Internal Organizational conditions

The corporate governance arrangements of the board and different committees of the board ensure compliance with the GL 44 standard starting 2014, which was translated into local regulation guiding internal governance mechanism of all credit institutions. Currently, Camellia has a small board comprising of four persons. The board is in the process of working with specific meetings on audit, compliance and risk management rather than having separate committees. This is because committees were not entitled to take decisions without board approval and this resulted in duplication of efforts for several board members.

The Camellia board is assisted directly by the senior managers (managing directors - MD) responsible for operations, compliance, risk and IA who directly manage all the centralized functions of - underwriting operations, risk management, compliance and audit (Internal as well as external) function respectively. A manager assists the MDs at Camellia. However, the IA and external audit work is handled by the compliance manager who has been in the compliance role for more than a decade. As previously suggested by Arena et al. (2010), this arrangement of putting IA under compliance head ensures that the regulatory logic of compliance is predominantly available to the IA team. This assertion is also in line with previous research of Martin et al. (2017) who demonstrated similar precedence of logic where doctors and healthcare staff, heading hospitals, stick to the logic of health care even if they are also made responsible for the business logic of profit-making.

Concerning IA, the full IA responsibility in Camellia is just one-year-old. Before this, all IA work was carried out by the parent corporate group.

(...) Last year, we didn't have our own internal audit. We were audited by the corporate audit or the internal audit of the corporate group. (Informant 18)

Since, the IA work at Camellia has only been established independently a year back after the regulatory reforms, the corporate logic of IA as bureaucracy is not easily available to lower level actors, instead it is taken care at the manager and senior manager level where they prepare the report for the board in consultation with the work of lower level IA actors as well as their counterparts in risk management. There is no separate Basel-IA team. Camellia has outsourced all of their IA activities, which is managed internally by the MD directly reporting to the board. The outsourced company determines which people to send for auditing:

We outsource to a company specializing in internal audit and advisory services within financial services and each time they perform audit they send out different persons. Therefore, it is not that there are always specific persons allocated to us. (Informant 18)

Due to the outsourcing of IA activities, the Basel-IA work at Camellia is organized in such a fashion that only the professional logic of assurance is available and the professional logic of consulting becomes constrained and less available to the low-level actors (Selim and Yiannakas 2000, Selim *et al.* 2009). This happens because as shown by several studies, outsourced IA work means less informal interaction between the IA and other functions, leading to hampering of consulting and assisting role that IA could play in helping line managers in mitigating identified risks (Caplan *et al.* 2000, Prawitt *et al.* 2012).

Agency in the Basel-IA work

Basel-IA planning is mostly done with an iterative and passive agency at Camellia where recently handed over prescriptions on IA to the Camellia's board are followed by the low-level actors. To keep an arm's length distance of Camellia's operations with the parent industrial company, which owns a majority stake; steering documents and guidelines for IA are prepared and approved independently by the Camellia board. The steering document lays a guideline on goal, planning, operations, reporting and code of conduct for all IA activities.

The IA plan is a three-year risk-based plan and is based on a yearly audit risk assessment carried out in fulfilling the corporate logic of bureaucracy of IA and is executed with a passive iterative agency at the manager level in strict cooperation with the board and MD. No actual planning decision-making is delegated to the low-level actors. There is no separate Basel-IA plan, and the Basel-IA activity is incorporated in the overall IA plan.

I would say there is a person here holding the contact with the internal audit since last year only. Before it was a mess. .Now we have a deputy MD who is in charge of the coordination planning with internal audit, and the audit plan for the whole year, of course, is decided by the Board, and it is based on so-called waste approach. (Informant 18)

The IA planning involves collaboration with the risk management department:

But we take part in their (internal audit) plans, of course, and they take part in our plans. So, in that sense, we both collaborate, and we make sure that we're not controlling or supervising the same topics, the same areas. (Informant 19)

However, regarding coordination between teams for planning, the informant 17 agreed:

'...there is room for improvement regarding this (audit plan) because we are still strengthening and improving.'

As explained in the previous section, due to the dominance of the regulatory logic of compliance, overemphasis on the compliance in assurance related work is reflected. Thus, the high-level goals of the assurance work in Camellia follow the institutional prescription of compliance, and this means that the Basel-IA work is carried out with an iterative and passive agency.

The third line of defense, our outsourced internal auditor, has to make sure that we are all compliant (with the regulations). They know the new legislation since they are auditing us, they know what should be in place. (Informant 18)

The quotidian Basel-IA work on the assurance of risk management function is carried out with an enthusiasm of verification (professional logic of assurance) as well as compliance (regulatory logic of compliance) to tick box and ascertain the presence of different elements of risk management. Thus, quotidian audit work is designed as an hybrid practice that mediates the two available logics (Busco *et al.* 2017). Since, these practices are settled hybrid practices, the quotidian work is also carried with an iterative and passive agency (Smets and Jarzabkowski 2013). The IA is mostly qualitative and document-based where the internal auditors look at the risk appetite, steering documents, model documents, plans, communication reports and ensure that these documents exist and thus assures that Camellia is compliant with the regulation. Due to the concentration of leasing and lending operations, most of the risk audit is focused on credit risk. The outsourced company conducts the IA work once in a year. Since Camellia is the leading industrial bank, their verification-compliance mix approach has become useful for several small finance houses in the country:

One of the duties of the internal audit is to assess how the second line of defence operate, whether it is effective or not effective. And it has become an output not only for Camellia but also for our competitors. (Informant 17)

Compliance with regulation is one of the major problems for the finance companies because they were not as tightly regulated before and lacked a robust IA process and structure. The informants cited two cases to show tightening regime- one of a small asset management company where the local supervisor issued a warning and the other of a currency exchange company where the local regulator revoked the license of the company for not following regulations. As an informant explained:

Until recently you could say, Okay, comply or explain. Now it is- comply or die. We are trying to cope with all this but it takes a lot of administration of course, and regarding reporting, I think we are sending more than 900 reports to the financial supervisory authority. (Informant 18)

These disciplinary actions by the local regulators have prompted Camellia to follow regulations regularly. In following regulation, we see projective and future driven agency at play that is driven by a desire to make practices compliant in the volatile regulative environment, rather than a desire to change institutions:

We follow this site from the local regulator on a daily basis, and we are subscribing to changes, so we are aware of what is happening. Also, as I mentioned before, we try to follow what the EBA and the Basal III regulations are stipulating. We have to be proactive in this area because when changes come into force and then become mandatory, it is quite a lot of effort for an organization to comply with the regulations. (Informant 18)

With respect to the consulting work of IA, the internal auditor prepares a report after the IA is conducted. The consulting work is carried with a regulatory logic of compliance. The informants emphasized compliance to set corporate standards or regulatory compliance several times concerning consulting activities.

So, for example, it's not enough (for regulators) to have controls at the banks. We have to prove that we constantly follow all this controls, that the breach of control is reported to the management, to the Board. That internal audit will follow up, that

deviations and actions. Our (internal) auditors also back recommendations for actions. (Informant 19)

The identified weaknesses during the audit are reported, along with recommendations and deadline for fixing the deviations.

If we get some deviations or recommendations that should be improved and these reports have set deadlines, so we need to solve or to eliminate these deviations within set deadlines. (Informant 19)

This IA report is then sent to the board as well as to the concerned departments. Help from internal auditors on mitigation of identified deviations is sometimes limited due to outsourcing, infrequent audits and limited socialization of the outsourced IA members. As a result, departments set their action plan using the report:

We get this (IA report) report, and we are the one responsible for coming up with some action plans and set the deadlines. (Informant 19)

Discussion and Conclusion

Based on three cases of Basel-IA units of three European banks, this paper set out to explore two central questions- 1) how internal organizational conditions constrain IA work by forcing IA teams to indulge in the iterative and passive agency. 2) how internal organizational conditions provided leeway to IA teams by enabling their active agency: evaluative and projective. Our results provide two contributions to the IA literature.

First, we contribute to the understanding of IA as a “governance of control” function as opposed to its traditional role as a control function. We argue that the existing research on the “governance of control” function of IA is limited to the varying configuration and practices of IA (Castanheira *et al.* 2009), its interaction with other control functions (de Zwaan *et al.* 2011), and the impact of such interactions on the independence, objectivity, and effectiveness of IA (Roussy and Rodrigue 2016).

Though the focus on understanding the interaction of IA with other control functions is exploding due to changes in regulations and standards (Spira and Page 2003, Hayne and Free 2014, Parker and Johnson 2017), there is a lack of research on understanding the leeway and constraints IA faces in its quotidian work while discharging its “governance of control” function (cf. Roussy, 2015). The aspects of quotidian IA work, especially in the banking domain, remain largely underexplored since banks consider quotidian IA work on “governance of control” functions to be strategically important and avoid researcher access to IA activities that might expose the deficiencies in different types of controls (Wahlström 2006, 2009). The importance of understanding leeway and constraints in the IA work as “governance of control” functions in the banking sector became even more important in the aftermath of the financial crisis of 2008 that exposed inabilities of IA’s governance on control functions (Humphrey *et al.* 2009, Christopher 2018). Also, the disciplinarian reforms of the control functions (including IA), initiated by regulators as a response to the crisis have reduced the leeway of IA work by introducing more stringent guidelines, strict definitions, and abandonment of the ideas of self-regulation (Baud and Chiapello 2016).

Second, we demonstrated how different type of agencies are simultaneously active in the lower level of organizations in responding and reconciling to the multiple institutional demands in an institutionally complex environment under which IA operates. In this paper, we reconciled both the factors, institutions, and agency, to theorize on a generic framework of how IA teams exercise their agency (Besharov and Smith 2014, Martin *et al.* 2017). To frame our contribution, we first look at how internal organizational conditions filter and determine which types of institutional logics will be accessible to the low-level actors. Finally, we consider different types of active agency in the Basel-IA work.

While claiming the availability of institutional logic within organizations, we caution against the view that multiple institutional logic is available to only the brave actors within organizations, termed as institutional entrepreneurs, who are shown to possess full agency (Maguire *et al.* 2004, Hardy and Maguire 2008, Battilana *et al.* 2009). Institutional entrepreneurs based literature claims that the agency of Institutional entrepreneurs is derived due to their possession of power, social-positioning, and socio-political skills or their knowledge (Hardy and Maguire 2008, Cattani *et al.* 2017, Martin *et al.* 2017). However, several other studies looking at the quotidian work of lower-profile actors, that do not possess power, social position or socio-political skills, have also sometimes asserted a high-level of autonomy and creative-capacity in their work (Bévort and Suddaby 2016, Martin *et al.* 2017).

Furthermore, the paper extends the previous findings that a similar constellation of institutional logics could also give rise to divergent outcomes at the level of practice (Goodrick and Reay 2011, Boch Waldorff *et al.* 2013). To substantiate our claim, we first demonstrated that the IA itself has four institutional logics: compliance from the banking regulators (Regulatory Logic); bureaucracy from the existing corporate adaptations of IA; and assurance and consulting from the IIA (Professional logic). In our case, the professional logic of IA itself is fragmented and consists of two components: assurance, and consulting (Boch Waldorff *et al.* 2013, Besharov and Smith 2014, Hayne and Free 2014). We argue that the corporate logic of banking is inherently linked to the logic of risk exploitation that allows banks to create value for its stakeholders (de Goede 2004, Palermo *et al.* 2016). Regarding the external institutional arrangement, in all the cases, the professional logic of assurance and regulatory logic of compliance of IA contradicted with the logic of risk exploitation. In contrast, the professional logic of consulting of IA and the logic of bureaucracy of IA coincided with

the logic of risk exploitation by facilitating solutions and mitigating tensions. However, despite this similarity of field-level institutional constellations, the results were different in different cases (Thornton 2002, Martin *et al.* 2015).

We find that the practices did not result from the free agency of the Basel-IA actors either where they chose from the available institutional logics. Rather, internal organizational conditions, especially structure and skilling of the Basel-IA teams, played an important role in making institutional logics available to low-level actors and in shaping their agency (Besharov and Smith 2014, Martin *et al.* 2017). Here, we found two approaches.

First, organizations could enact the Basel-IA as an embedded unit within the focused IA unit to saliently promote one specific institutional logic- the professional logic of assurance and consulting of IA (Aster case) or the regulatory logic of compliance (Camellia case) (Battilana and Lee 2014). Furthermore, less socialization of IA staff with other teams could hamper availability of other logics (e.g., hampering of the professional logic of consulting of IA in Camellia due to outsourced IA activities and hampering of the business logic of risk-exploitation at Aster due to non-rotation of IA staff to other business units). In such approaches, no interaction between IA and carriers of different logics could also exacerbate tension (e.g., conflicts in Aster between Basel-IA and risk management team on collateral definition) (Binder 2007, McPherson and Sauder 2013, Smets *et al.* 2015). We understand that right amount of tension could be useful in engendering healthy competition, critical thinking, and innovation. However, there have been cases where such arrangements have resulted in failure and dysfunctionality (Battilana *et al.* 2009, Greenwood *et al.* 2011). Given the contradictory findings, we promote researchers to explore “appropriate” level of tensions to be

harnessed between IA and different control units that could promote healthy competition, critical thinking, and innovation.

Second, organizations could structure Basel-IA units where multiple institutional logics are available to them. For example, Begonia enacted the Basel-IA as a virtual unit within the existing IA unit enabling access to professional, regulatory and corporate logics of IA. This was supplemented with IA teams also being rotated to gain an idea of the business logic of risk-exploitation. This type of approach has been especially suggested in the literature to move away from dysfunctionality of completely segmented approach that could create unnecessary tension (Pache and Santos 2013, Busco *et al.* 2017, Martin *et al.* 2017). This approach enables actors in either choosing a specific dominant logic or becoming carriers of multiple logics. However, as suggested in the previous literature, this approach requires socializing of staff to help them create practices addressing blended logic (e.g., rotation of IA team members in the Begonia case) (Besharov and Smith 2014, Martin *et al.* 2017). For this approach to be successful, centrality of teams and power has been shown to be essential in guiding the consistent admixture of logics (Besharov and Smith 2014, Martin *et al.* 2017).

Our analysis reveals that actors respond to multiple institutional logics in three different ways. First, actors separate influence of different logics in different practices (Smets *et al.* 2015). Second, different logics are addressed by different actors (Besharov and Smith 2014, Martin *et al.* 2017). Third, actors blend available institutional logics to create hybrid practices (Busco *et al.* 2017). Different types of agency come into play depending on the way actors respond to multiple logics. For the first and second type of responses, most of the times, iterative and past looking agency becomes active where different actors or different practices follow single institutional prescriptions to the

letters. For the third type of response when there are multiple institutional prescriptions or for the first two types of responses where the institutional prescriptions are ambiguous as to what exactly to do especially in the quotidian tasks, a practical-evaluative agency rooted in the here and now allows actors to create hybrid practices. The resolution of the conflicting or ambiguous institutional prescriptions depends on actors' choice of the best possible way to do things. We find projective and forward-looking agency in addressing regulatory logic of compliance. This is mainly due to the volatility and contemporary changes in regulations after the financial crisis. Furthermore, we call the practices with iterative and past looking agency as collective practices and practices rooted in here and now and practical-evaluative agency or rooted in future and projective agency as localized. We use these terms since institutional prescriptions activated due to iterative agency mean similarity of practices in different companies. In contrast, practical-evaluative and projective agencies lead to context-laden and varying responses from different actors.

Our results provide two important pragmatic implications for the IA literature. First, our results could help normalizers, standard setters and regulators in reconsidering their incompatible clauses and clauses on organization of IA teams by understanding the internal organizational conditions of the IA teams and their impact on the way differing normative or coercive prescriptions are adopted (Roussy 2013, Mihret 2014, Ferry *et al.* 2017). As suggested by Christopher (2018), we promote scholars to focus on how boards manipulate institutional flexibility to disarm control functions. On a reflective note, we also argue that flexibility attributed to agency due to multiple institutional demands could be considered useful instead of problematic; especially in the context of IA-expansions to different organizational control processes, where both IA and the control process are influenced by multiple external regulations (Binder 2007, Smets and

Jarzabkowski 2013, Arena and Jeppesen 2015, Smets *et al.* 2015) and the varying internal need to be compatible with existing practices (Jeppesen 2010, Chambers and Odar 2015, Roussy and Brivot 2016). Enabling of the agency could also be utilized to promote freedom of interpretation and critical thinking to IA members to make their control-work effective.

Second, an understanding of the nature of agency exercised by IA in balancing competing institutional demands could help organizations in promoting IA approaches as independent and objective (Christopher *et al.* 2009, Roussy 2015, Roussy and Rodrigue 2016). As suggested by previous research, our results demonstrate that the independence and objectivity of IA teams could be better ensured by insulating the IA champions in top management (Roussy and Rodrigue 2016) as well as the day-to-day carriers of IA (Roussy 2015) from the business logic of profit-making. In the case of Aster, this separation allowed IA members to raise concerns about questionable aspects of risk practices. The prescription of consulting/helper role of IA has been criticised by the existing literature that adds sympathy and requires compromise from IA members in carrying out their independent work (Roussy 2013, Mihret 2014, Ferry *et al.* 2017). Though our results do not directly cast a shadow on the helper role, we promote further research on whether and how prescription of helper role by the COSO and the IIA promotes compromise on the independence and objectivity of the IA units (Selim *et al.* 2009). We also promote further studies on the specific outsourcing configurations (Caplan *et al.* 2000, Prawitt *et al.* 2012) and rotation of IA teams (Christ *et al.* 2015) as dimensions of research on how they impact objectivity and independence of the IA teams. Also, since IA has to extract information from line managers or control managers, we promote further studies investigating how IA teams could keep their

distance at the same time being likable and astute in extracting information from the line managers (cf. Fanning and David Piercey, 2014).

Our findings utilized the institutional approaches that explain the reconciled coexistence of different material practices related to different institutional logics within organizational units, especially for high-level and broad practice goals (Busco *et al.* 2017, Martin *et al.* 2017). This reverberates well with the rich accounting literature regarding its mediating role of different institutional logics as separating/decoupling (Lounsbury 2008, Rautiainen 2010, Rautiainen *et al.* 2017), reconciling (Busco *et al.* 2017) or merging (Thomson *et al.* 2014) of institutional logics. We call for further research to extend this mediator role of accounting practices to IA practices by exploring how IA could act as a mechanism that allows domination, reconciliation or merging of specific institutional logic resulting in variation of practices.

Our results open up several avenues for future research. Further studies on IA catering to other organizational control processes (cf. Roussy and Brivot 2016, Roussy and Rodrigue 2016), such as compliance could shed light on the governance of control approaches of IA, especially how the “epistemic” characters of the specific control processes affect IA extensions. Future studies could also investigate the intra-organizational comparison of IA practices as governance of control function (cf. Binder 2007). Such intra-organizational studies could contribute to the vivid internal organizational dynamics, tension and competition leading to intra-organizational variation of IA. Future studies involving non-financial sector could help strengthen the understanding of internal organizational conditions and their effect on agency sans tighter regulatory context.

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Table 1: The context of the cases

Characteristic	Aster	Begonia	Camellia
Organizational Context			
Revenue	(> 5 billion Euro)	(> 5 billion Euro)	(> 0.1 billion Euro)
Employees	(> 50,000)	(> 15,000)	(< 1000)
Number of products	High	High	Low
Complexity of operations	High	High	High
Board-Size	(≥10)	(≥10)	Small (4)
Organization	Holding-company	Holding-company	A Standalone unit within an industrial company
Detailed context affecting Basel-IA			
Risk-Based Quantitative Models (Credit, Operations)	Advanced	Advanced	Basic
IA Functions	(decade-old)	(decade-old)	Independent since one year
Integrated View on Risk and IA	Yes	Yes	Yes but evolving
Regulatory Concerns	Local, regional, International	Local, regional, International	More Local, less International

Table 2: Interview details

Company	Interviewees	Number of Interviews	Informant No.
External And Institutional Informants			
IIA	Director	1	1
BCBS	Member Secretariat (IA)	1	2
Big-4	Director	1	3
Big-4	Director	1	4
Risk Consulting Firm	Head, Regional Sales	1	5
IA Consulting Firm	Director	1	6
IA Consulting Firm	Manager	1	7
Case-Informants			
	Basel-IA, team member 1	2	8
	Basel-IA, team member 2	1	9
Aster	Chief Area Risk Officer (CARO)	1	10
	Manager Assisting CARO	1	11
	Basel-IA, team member	1	12
	Basel-IA, Responsible	1	13
Begonia	Innovation Solutions Head	1	14
	Business Support Head	1	15
	Change Management and Restructuring Consultant	1	16
	Regulatory Coordinator	1	17
Camellia	Manager, Compliance and Audit (internal and external)	1	18
	Manager, Risk Management	2	19

Guidelines for semi-structured Interviews

PHASE I – Warming up

- Introduction to the research project
- Background and purpose of study
- Confidentiality and material use (recording permission, name and title use)
- Available-time check

PHASE II – Free Description (General open ended question)

- Open ended questions on organization
- Interviewee's role
- Interviewee's responsibilities
- Interviewee's Network within organization
- Get some pointers on documents (internal and external)

PHASE II – Detailing (Details asking for - examples, summary questions - I have understood..., clarifications - Do you mean...)

- Interviewee's Process of work
- Interviewee's difficulties and challenges with work
- Questions on BASEL Audits: steering documents, planning approaches, division of work, models
- Questions on risk management and models, internal validation, compliance (depending on the team and flow of discussion)
- Questions on important regulations
- Questions on norms followed
- Questions on collaboration and conflict with other teams
- Question on skill sets, deficiency of skills, training

PHASE IV – Closure (Thank you)

PHASE V – Disengagement

- General discussion
- Feedback
- Summary
- Some views from our side
- Contacts within and outside organizations/ Further interview request